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LANGUAGE:

ITS ORIGIN AND DEVELOPMENT.

BY

T. HEWITT KEY, M.A., F.R.S.



*QVÍ FEROS CVLTVS HOMINVM RECENTVM
VÓCE FORMASTÍ CATVS.*

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P R E F A C E.

THE following volume has grown out of the Lectures on Comparative Grammar, which have been delivered in University College in the years 1841–1873; but some matters have been passed over more lightly, because they had been discussed in greater fullness in the ‘Philological Essays,’ which were published in 1868, and may be regarded as supplementary to what is now put forth.

It will be found that the illustrations of my arguments have been drawn chiefly from the Latin language, and this for two reasons. In the first place this has been the special line of my own studies; and secondly the language is one likely to be familiar to a considerable number of my readers. No doubt many will see with surprise that the Sanskrit is not here made the one basis of my enquiries; but while I once more confess with regret, but not with any feeling of shame, my ignorance of this language, I must also now declare my matured conviction, that the high claims of superiority over all other languages commonly put forward in favour of this language, are grounded on gross exaggeration of its merits;* and over and above this, that the use made of it by Sanskritists is often far from satisfactory. On this head I

* I am glad to find a Professor of Sanskrit, and one too who is avowedly a great admirer of Bopp, expressing himself in a more reasonable manner: “To the philologist Sanskrit comes next in importance to Latin and Greek” (W. D. Whitney’s ‘Oriental and Linguistic Studies,’ p. 403); and again justifying my recommendation of caution in accepting the statements of German Sanskritists, when he writes:

expressed grave doubts in my paper entitled, 'Quaeritur,'—doubts that since that time have been either admitted to be reasonable or else left unanswered. At the same time I have made considerable use of the evidence to be drawn from Sanskrit, accepting with due caution what I find in the writings of German scholars. To obtain a mastery of the language itself has been a hopeless desire for me considering my many engagements; but if it turn out that the present volume, in spite of this defect, contribute in any way to a furtherance of linguistic science, an excuse for the publication will be complete.

In the Preface to the 'Essays' I expressed a fear that traces of haste would be visible in them; but that I had two pleas for mitigation of censure, first that the Headmaster of a school of nearly four hundred boys had little leisure for other work, and again that such leisure could not be expected to be very productive for one who had entered his seventieth year. These two arguments have much additional strength now after an interval of more than five years, and with an increase in the school from less than four hundred to more than five hundred and fifty boys.

In the same pages I enumerated the various philological papers which had proceeded from my pen, during the forty years of my connection with University College; I will now add, first two papers which were omitted in that list, viz., a reply to a review of my Latin Grammar by G. F. (George Ferguson?), in the 'Classical Museum,' No. xv., p. 109, 1847, which reply was published in the same series, No. xix., p. 57; and: 'Reconsideration of (English) substantives in *let*' in

"Not a single department, even of Indo-European philology, can be mentioned in which there does not remain an infinite amount of labour to be done, in rectifying Bopp's errors, and in extending and perfecting his researches; and that not only in detail, but also in general features and grand outlines" (ibid. p. 221).

the 'Transactions of the Philological Society' for 1862-1863, p. 220.

Later papers read by me before the same society, are :—

Nov. 3, 1865, 'On the name *Barmouth*, and thoughts suggested by this enquiry.'

June 1, 1866, 'On Plurals in Latin with a Singular Meaning, and especially on Vergil's use of the word *menta*.'

Feb. 26, 1867, 'The origin of the Latin adjective *mālus* and the substantive *mālum*.'

April 26, 1867, ' *Post* and *After* the same word.'

May 3, 1867, 'On the German Prefix *Ver*.'

May 17, 1867, 'On Excrescent Consonants, Part I.

June 7, 1867, " " " " , Part II.

" " 'On Latin Disyllabic Perfect Participles (with a short penult, as *litus*.)'

Dec. 6, 1867, 'Prevalent Errors in the Treatment of Latin Suffixes,' Part I.

Feb. 7, 1868, " " " " , Part II.

May 21, 1869, 'On the Derivation of *omnis*, *uxor*, *nurus*, with other Latin Etymologies.'

Nov. 5, 1869, 'On some of the Suffixes of Greek and Latin Prepositions.'

March 4, 1870, 'A Partial Attempt to reconcile the Laws of Latin Accent and Rhythm with those of Modern Languages.'

Dec. 2, 1870, 'On the Compression of certain words in the old Latin Drama, as shown by the Metres and by Etymology.'

Nov. 3, 1871, 'The correction of some errors in Latin Dictionaries,' Part I.

Nov. 17, 1871, " " " " , Part II.

Jan. 19, 1872, " " " " , Part III.

Nov. 1, 1872, 'Accent the governing principle, not merely of the Comic metres, but also of Latin Poetry in general, and first of Vergil's Hexameters.'

Nov. 21, 1873, 'Some corrections of the Text of Terence, especially in reference to Metre.'

Add: A Professorial Dissertation, published with the Prospectus (Index Lectionum) of University College, London, for 1871-72, viz.:—

'On Latin words commencing with an *f*, especially *ferrumen ferruminare*, as standing in Lexicons.'

(Where, in p. 11, after line 15, the following words have been omitted in the printing, '*φηρ θηρ*, etc. Nay, the Aeolic is in the habit of substituting a labial for a dental, as:'. Again, in p. 13, l. 29, for *habént discipuli* read *habent disciplinae*).

In all but the first of these papers in connection with the Philological Society, I have given the date of the reading, rather than that of the publication, because of late years there have been sad delays in the printing owing to the want of funds. But to me this defect is of less importance, as nearly all the substance of my papers has now been placed before the public either in the 'Essays' or in the present Volume.

To hurry this work through the press has, under the circumstances, been a matter of necessity. Had more time been at my disposal, I should gladly have availed myself of the assistance of numerous friends, and so should have escaped errors which will be only too glaring. As it is, it has been but occasionally that I have had the advantage of placing a sheet under the eye of a friend. Still on this head I have to thank my colleagues, Professors Malden, Rieu, and Eggeling; also Mr. Ingram Bywater, Mr. Talfourd Ely, and Mr. J. S. Thornton. Others who have kindly answered enquiries are Mr. Ralston and Mr. A. W. K. Miller of the British Museum, and Señor Santa Maria. Lastly, Mr. John Power Hicks has rendered me valuable assistance in many ways, and in particular by reading over many sheets

when finally printed, and so placing before me a list of Errata, ugly enough, but less so than I had feared.

In going over the book myself I find several omissions to be regretted, as first that I have not given a whole chapter to the strange deflections of meaning from the original power of a root that so often occur in language, deflections that at times carry us from one pole to the opposite pole. Thus, our own term 'apparent' is now commonly used as the opposite to 'real,' but still retains its earlier meaning in the combinations 'apparent time,' as used in astronomy and 'heir apparent.' Similarly the Latin *ad speciem, per speciem*, etc., imply what is deceitful, and so too our own 'specious' and 'spectre,' whereas 'specie' in modern use designates the precious metals as opposed to paper-money and so of intrinsic value, in agreement with the proverb 'seeing is believing.' Good examples of violent changes are seen in the double meaning of the German *Untiefe*, as used alike of water dangerously deep and dangerously shallow (see p. 394), and again in the E. 'usurp' as contrasted with the L. *usurpare* (p. 412).

Another point on which I might perhaps with advantage have insisted is the misleading influence of forms owing to erroneous transformation. Thus *Barmouth*, on the west coast of Wales, owes its ordinary name to a confusion with the familiar *Yar-mouth, Ex-mouth, Plymouth*, etc., and the term *Bar* leads people to see in it some collection of sand at the mouth of the neighbouring river, for few rivers are without such an inconvenient adjunct. Yet on investigation we find that the part of the name which really signifies 'mouth,' is not the second but the first syllable, a corruption of the Welsh *aber*, for the earlier name was no doubt *Aber-Mowdd*, i. e., the mouth of the river *Mowdd*, which in the upper and insignificant part of the stream has, what is there appropriate, the diminutival name *Mowdd-ach*, 'the little

Mowdd.' Similarly by the side of *Ar-broath*, as the name of a well known Scotch town, we find the variety *Aberbrothick*, the two pointing to the position of the place at the mouth of the river *Broath* or *Broth-ick*. But here the suffix *ick* may belong to the name of the town rather than to that of the river; and with such use of a diminutival suffix we may compare the double forms of a Welsh town *Brecon* and *Breck'n-ock*, and of several Italian and Sicilian cities which for a Greek have the names *Ταπας* (*Ταπαντ-ος*) *Ακραγας* *Σιπρους*, etc., but for a Roman the diminutival varieties *Tarent-um*, *Agrigent-um*, *Sipont-um*. But to return to the subject of terms which have been modified under the idea of some false derivation, it will be well to refer to Mr. Wedgwood's paper in the 'Transactions of the Philological Society' (1855, p. 62), where he deals with many interesting cases of the kind.

In matters not omitted I have failed at times to include in my argument some useful illustrations, which at the time escaped me. Thus, in p. 153, in dealing with the *u* of Latin perfects, as occupying the ground which belonged to *s*, I noticed the guttural of Greek perfects in *κ*, as *εσταλκα*, but should also have compared with this the Provençal habit of exhibiting a *e*. Thus Diez (Gr. 2, p. 176) tells us: "*tenu* of L. *tenui*, ought by the usual letter-change to have been *tenf*, but is *tene*; so *cale*, *cole*, *dole*, *vale*, *vole*, *abere* (*aperui*), *aie* (*habui*), *dec* (*debui*), *pot* (*potui*); and, again, *conoc* (*cognovi*), *erec* (*erevi*), *moc* (*movi*), *ploc* (*pluvit*), *paroc* (*parui*)."

In p. 305, I somewhat hastily used the epithet 'illogical' in speaking of the *met* of *sibimet*, &c., whereas if *seb*, the root-syllable of this pronoun, meant 'same,' as there is good reason to believe, then *met* (*mat*) in the sense of 'man' is thoroughly in place.

But the most serious fault in the book lies perhaps in repetitions; I say this however with much hesitation, fearing

that others will detect absolute errors of a grave character, for on such slippery ground to stumble at times is all but inevitable. Still, if I was ever to publish my ideas, now was the time, for I might well adopt much of what Varro says at the beginning of his work on farming: "Otium si essem consecutus, commodius hæc scripsissem, quæ nunc, ut potui, exposui, cogitans esse properandum, quod, ut dicitur, si est homo bulla, eo magis senex; annus enim septuagensumus sextus* ammonet me ut sarcinas colligam, antequam proficiscar e uita."

The closing thought however does not accord with my feelings. So long as my health, bodily and mental, enable me, I purpose to labour at the oar, and, the present task now finished, devote all my leisure hours, as I have done for many years, to my Latin Dictionary, and with some hope of reaching the end, seeing that I have more than 2400 pages of quarto manuscript already filled, and have included therein nearly all those words in which I thought myself able to make some improvement. The chief motive indeed which induced me to suspend this first object of my literary labours during the past year has been the feeling, that the present volume would give the reasons on which my innovations are grounded, and so serve as a fitting introduction to the larger work.

* "*Octogensumus*" Varro.

UNIVERSITY COLLEGE, LONDON,
March 20th, 1874.

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CORRIGENDA AND ADDENDA.

entered by T.H.K.

The reader is requested to make the corrections in the text, especially those which have an asterisk.

Page	Line	For	Read
3	-1†	Muller	Müller.
8	13	ualgus	uoligus.
15	-9	thyself	oneself.
*17	20	p. 70	p. 99.
25	15	dan unt	dan-unt.
*34	6	syllable	symbol.
..	16	(dele <i>aue</i>)	
43	-12	Hoogeeven	Hoogeeveen.
48	-1	έταιρα	έταιρα amica.
*57	8	are	is.
68	-14	Metamorphoses	Metamorphosis.
75	-7	υ-ιος	ύ-ιος.
..	-8	υιοκας	ύιοκας.
76	6	ec scendo	ec-scendo.
87	7	ap or ap	ap or άp.
*92	1	nadder	Natter.
94	11	τεμε-ν-ος	τεμ-εν-ος.
99	3	Essay, p. 291	Essays, p. 290.
*101	4	eine	einen.
113	-13	allerbeste	allerbest.
*114	8	Mθ	Λθ.
..	9	vermen . . . vermis	uermen . . . uermis.
115	5	iungit	iungit.
*122	-14	132, 134	121, 123.
123	17	heel	heel, cf. <i>callum</i> 'hard skin.'
125	-12	flannel	flannel χλαίνα.
128	8	(dele 137)	
*134	-11	well	1½, well.
140	4	you	yon.
..	6	vios	ύios.
*150	-9	2, 2, 61	Stic. 2, 2, 61.
*156	-14	1, 1, 10	1, 1, 110.
*158	-7	preterite	preterite of strong verbs.
159	6	evidence	evidence,
163	9	sero	ser (cf. θεσμος).

† A prefixed minus sign means from the bottom of the page.

Page	Line	For	Read
*167	13	dimittere (bis)	dimitto. /
..	14	suffixes	suffix.
172.	11	<i>uolgere</i>	<i>volgere</i> .
*176	-8	(<i>αν ενν</i> etc., add: but not as regards <i>εν-νυμι ζων-νυμι</i> where the division is as here marked).	
179	-5	<i>c-zhivo</i>	<i>o-zhieu</i> .
193	14	<i>ov-ou-ai</i>	<i>ov-ou-ai-</i>
*195	1	2, 3, 121	1, 3, 21.
..	-11	Sincerastum	Syneerastum.
*196	8	<i>quo fronte</i> (bis)	<i>qua fronte</i> .
206	-12	<i>toufira</i> or <i>soufira</i>	<i>tufira</i> or <i>sufira</i> .
211	12	म	म्
*213	2	<i>bison</i> and <i>bis-ere</i>	<i>bis-pu</i> and <i>bis-ire</i> .
220	4	(add: <i>hi mores eaque caritas</i> , 23, 49, 3).	
228	-14	<i>conventionid</i>	<i>conventioned</i> .
*..	-13	<i>σνι</i>	<i>σν</i>
229	14	lord,	lord;
..	-7	<i>hisea</i>	<i>hisea</i> .
230	-3	so	so the fem. from.
232	11	form	forms.
233	18	<i>m . . . v</i>	<i>um . . . ov</i> .
..	22	again	again I believe to be.
*234	13	a mere <i>a</i>	a mere <i>a</i> suffices.
238	10	Barnett	Barnet.
..	-14	<i>aspa-n-añm</i>	<i>aspa-n anm</i> .
243	-13	Hallewell	Halliwell.
245	-7	<i>nu-crum</i>	<i>nuc-crum</i> .
246	3	<i>μονσα-ισιν</i>	<i>μουσα-ισιν</i> .
*247	8	(Add that: Zend also has <i>tá</i> for <i>tua</i>).	
*255	-2	<i>e</i> and <i>n</i>	<i>ε</i> and <i>ν</i> .
258	-13	abiudicare	abiudicabo.
259	-6	<i>iar</i>	<i>iar</i> .
268	11	<i>éius</i>	<i>éius</i> .
269	12	(read <i>aller-best aller-höchst</i> .)	
..	23	noblest	goodliest.
270	-13	(Add: Add It. <i>fresco fresco</i> .)	
*..	-3	single	simple.
300	-15	<i>Αλεξανδρος</i>	<i>Αλεξανδρος</i> .
302	2	humo	humo-.
*305	-5	(illogical	see Preface, p. viii.)
321	11	inserts	insert.
*323	4	specially	especially.
324	22	(Add: So too in Luer. 5, 1341 Lachmann might have retained <i>si</i> with the sense of <i>sic</i> ; the same holds for Hor. Od. 1, 16, 3, <i>si geminant</i> ; and Od. 3, 24, 5, <i>si figit</i> .	
*326	10	<i>questi</i>	<i>questo</i> .
354	-2	(read <i>plaustris</i> , not <i>plaustri</i> in Luer. 6, 548).	
359	16	<i>meipien</i>	<i>incipen</i> .
375	7	<i>y grecque</i>	<i>y grec</i> .
*385	9	what	which.
..	-2	(after 47) Add: cf. Luer. 5, 683).	
395	7	<i>auinter</i>	<i>unter</i> .
398	2	), 9638	, 9638).
403	-8	prov.	Prov.
406	-9	<i>Oθι</i>	<i>’Oθι</i> .
407	12	Essay	Essays

Page	Line	For	Read
412	13	those	these.
415	-2	off	off of.
425	9	prov.	Prov.
432	16, 18	<i>Achernus</i>	<i>Acheruns.</i>
460	19	<i>uénimus</i>	<i>uénimus</i>
462	4	<i>péreas</i>	<i>péreas</i>
..	7	<i>prœlia</i>	<i>prœlia.</i>
466	6	<i>propius</i>	<i>propius.</i>
*473	8	But . . . such	Such
*..	11	Perhaps . . . see	(add
480	6	<i>Distraxissent disque tulis-</i> <i>sent</i>	<i>Distraxissent disque tulis-</i> <i>sent.</i>

ABBREVIATIONS.

A.K.	Aufrecht and Kirchhoff's Umbrian Inscriptions.	L.	Latin.
A.-S.	} Anglo-Saxon	L.S.	Liddell and Scott's Lexi- con.
A.-Sax.		N.	Norse.
Arm.	Armenian.	O.	Old, of Languages.
Boh.	Bohemian.	Orel.	Orelli.
Bret.	Breton.	Osc.	Oscan.
CIL.	Corpus Inscriptionum La- tinarum of Ritschl and Mommsen, vol. i.	Our } Society. }	The Philological Society of London.
D.	Dutch.	Pr.	Prussian.
D.G.	Deutsche Grammatik of Grimm.	Prov.	Provençal.
Dan.	Danish.	Rh. Mus.	Rheinisches Museum.
E.	English.	Ribb.	Ribbeck, as editor of tragic and comic fragments.
Et. F.	Etymologische Forschun- gen of Pott.	Russ.	Russian.
Eyss.	Eyssenhardt.	S.	Sanskrit.
Fris.	Frisian.	Se.	Lowland Scotch.
G.	German.	Sl.	Slavic.
G.	Grotius, as editor of Mar- tians Capella.	Sp.	Spanish.
Gael.	Gaelic.	Sp.	Spengel, as editor of Varro's de Lingua Lat.
Go.	Gothic.	Sw.	Swedish.
Gr.	Greek.	U.K.S.	Useful Knowledge Society.
It. }	Italian.	Umb.	Umbrian.
Ital. }		V.	Vahlen, as editor of Ennius.
K.	Keil, as editor of Gram- marians.	V.G.	Vergleichende Gramma- tik of Bopp.
Leg.	Legonidee.	W.	Welsh.
		Z.	Zend.

ADDITIONAL ERRATA.

<i>Page</i>	<i>Line</i>	<i>For</i>	<i>Read</i>
23	10	words	verbs
171	5	132	121
175	25	αρμογη	ἀρμογη
176	26	έννυμι	ἐννυμι
186	5	si	is
218	15	the	are
260	1	ios (ior)	ios (ior)
303	10	ia	ia
304	3	ia and iω	ia and iω
335	25	έννυμι έσθης	ἐννυμι εσθης
429	3	εύ	εϋ
452	10	Ιππόμεδοντος	Ἰππομεδοντος
459	23	uxori	uxorem
469	2	quæerundae	quaerundae
..	9	emphatic :	emphatic.
470	3	nēne usquam	nēne usquam
474	20	demist	domist
528	21	ostulo	ustulo



LANGUAGE :

ITS ORIGIN AND DEVELOPMENT.

CHAPTER I.

THE ORIGIN OF LANGUAGE.

LANGUAGE, taken in its most general sense, may be defined as the means by which the thoughts of one mind are conveyed to another mind, and of course such conveyance of ideas must have for its channel one or more of the senses. Of these the most available are the sight and hearing, but we must not extend our admission of this superiority to the point of assuming the absolute exclusion of the others. Thus the sense of smell is turned to account when the bloodhound is set upon the track of a fugitive by putting to his nose some dress lately worn by him ; but the materials at hand for action on the nostrils, the *copia narium* so to say, must needs be limited. In those sad but happily rare cases where the channels of the eye and ear are both closed, time was when the unhappy sufferer was abandoned to a life of worse than brutal torpor ; but by modern science the sense of touch alone, it is said, has been made to supply in some measure the deficiency, as in the reported case of Laura Bridgman.

Oral and visible language however have such advantages over all others that these alone can claim our attention, and these have each its special advantage or advantages. The invention of visible language is of easier conception, as it may well consist in the imitation of natural objects and actions, by which

the story is at once told; and secondly, *littera scripta manet*, what is depicted or written may continue as a more or less permanent record, whether on stone, metal, brick, leaves, bark, parchment, or paper. On the other hand the language of sound has in its favour that once invented it calls for the aid of no external material. The voice is ever with us; and the ear is ever ready to receive impressions from every direction, above, below, and around us. Then again sound travels without the aid of light. Thus the language of pictorial symbols is more easily invented and understood; the other, when once invented and understood, is better adapted for the ordinary uses of life. The difficulty of invention however is a difficulty that occurs but once, the difficulties in the after-use of language, such as they are, never cease. Oral language then has the first claim on our attention; and this the more that the use of oral language is now coextensive with the existence of man, while perhaps for one-half of the human species written language has no meaning. Add to this that two most important branches of visible language, viz. hieroglyphics and the written alphabets, are themselves grounded upon oral language.

The language of sound then will be the leading theme of what follows, and in this sense the word language will be always used, unless the contrary be stated.

A nobler subject of study cannot be conceived, for it forms the main instrument of man's superior development, to which he owes it that he stands so far above the rest of the animal world. Not that other living beings are wholly without such means of communication, for no thoughtful person can watch the intercourse of the little ant for example with its brother-ants, without seeing that there exists between them some mode of interchanging ideas. This is but one example, but the same truth holds of all gregarious animals. But to return to man, how are we to explain the first origin of oral language? Here however we are stopped at the outset. By not a few it is laid down that the problem is insoluble. Thus in the 'Statuts' of the 'Société de Linguistique de Paris,' founded in the year 1865, with Prof. Egger for its first president, the second article

runs: "La Société n'admet aucune communication concernant l'origine du langage." Again one of our most admired writers at home says: "How this latent power evolved itself first, how this spontaneous generation of language came to pass, is a mystery; and as a mystery all the deepest inquirers into the subject are content to leave it."

Then again it is at times said or hinted, that the enquiry savours of impiety, especially when the invention is ascribed to man's own efforts under the stimulus of wants which social life brings with it. But the book of Genesis, it is now admitted by our best-informed divines, was not written to form a code of science; yet taken in its most literal sense, the Mosaic account, instead of justifying the assertion of the writer to whom reference has just been made, that "God gave man language," expressly assigns the immediate invention to Adam. Another popular writer* contends that "man could not by his own power have acquired the faculty of speech, which is the distinctive character of mankind, unattained and unattainable by the mute creation;" and goes on to confirm his proposition by a quotation from Wilhelm v. Humboldt's writings: "Man is only man through language, but to invent language he must already have been man." This at first sight is a striking, a taking argument, and one that would be thoroughly valid on the assumption that language must have been created, so to say, at one gush, like a metallic casting. But if we include in our view the possibility of a gradual and slow development of the faculty, such as the Oxford Professor himself in the first chapter of his book assigns to the creation of all the sciences, including by implication the science of language (and I say this the more confidently, because on any other theory, the whole chapter has no claim to a place in his book), then the whole difficulty is dispelled. The first attempts at language on the part of yet savage man may well have been of the rudest; but even the possession of this modicum would have contributed a something to the improvement of his reasoning powers; and so another addition would

* Professor Max Müller, in his first series of lectures, p. 357.

have been made to his petty stock of words; and thus in the long course of time, the faculty of reason and the faculty of speech, reacting each on the other, the ultimate result might be of a grandeur wholly out of proportion to the meanness of the origin; and thus, to use his own words (as put forward in an early passage of his book, p. 5), "The foundation of what was to be one of the most glorious structures of human ingenuity in ages to come may have been supplied by the pressing wants of a semi-barbarous society." But the author of the 'Study of Words' (p. 16) takes a view similar to that of W. von Humboldt: "God gave man language," he says, "because he could not be man without it." This seems to imply that man's faculty of language was contemporary with his creation. But how is this doctrine to be reconciled with what I suppose will be allowed on all hands as a fact, that languages in their early condition are wholly wanting in terms for spiritual and metaphysical ideas, so that eventually this want was supplied by loans of words, which in themselves belonged to the material world? For example, to borrow Prof. M. Müller's own instances, "*anima* 'the soul,' from *an-* 'to blow,' *spirit* from *spirare* 'to breathe,' and *ghost*, which in its first meaning was virtually the same word with *gust*, with *gas*, with *yeast*" (p. 387). But the writer who thus regards language as a miraculous gift to man at his first creation, also holds that primitive man existed in the most perfect, the most spiritual condition. I am driven then to the inference, that this same writer, unless he reject the usual doctrine that the terms for spiritual ideas were obtained by metaphor from those of the external world, and consequently of later origin, must admit that his primitive man, when in his most perfect state, was destitute of that part of language, which was requisite to express all the sublimer elements of his mind. For one then I have never been stopped by such attempts to throw a wet blanket on the enquiry; and find some encouragement in the wonderful results of persevering study in other branches of knowledge. Could there have been conceived a more hopeless object for man's thoughts than to determine the structure of the sun? and yet the wonders of the spectrum

enable the chemist to affirm with something like certainty that hydrogen constitutes one of the sun's elements. Shakspeare again had an imagination not of the weakest, yet his Puck, for putting a girdle round about the earth, still wanted forty minutes, whereas modern science can in plain reality effect the same in some four seconds.

But before stating my own views as to the solution of the problem, How can sound express thought? I would give my reasons for putting aside two proposed answers. First of all that of Prof. M. Müller. In his first lecture he commences with the problem of the origin of language, as I am doing, and with this object he pursues a line of argument which would lead his reader to expect that he saw in the origin of language, what he saw in that of all the other sciences, a gradual development of a wonderful result from the pettiest beginning. But all at once he drops the enquiry, resuming it only at the beginning of his last chapter (pp. 349-399); where we have, first a quotation from Dugald Stewart, to which I give a hearty assent, that we ought to spurn with contempt "that indolent philosophy which refers to a miracle whatever appearances, both in the material and moral world, it is unable to explain." Yet again he puts off his explanation, much as though it would not be very acceptable. It is only in page 391 that he says: "And now I am afraid that I have but a few minutes left to explain the last question of all in our science, How can sound express thought?" and then we are somewhat abruptly told, that "man in his primitive and perfect state possessed the faculty of giving expression to the rational conceptions of his mind." But surely to say he possessed the faculty is no answer to the question, how he came into the possession? However, in a few lines he further tells us that the said "faculty was an instinct, an instinct of the mind as irresistible as any other instinct." And again, in a note, he adds: "The faculty peculiar to man in his primitive state, by which every impression from without received its vocal expression from within, must be accepted as an ultimate fact." Let me add that in another

page of the same work he speaks of "the 400 or 500 roots," which are "the constituent elements" of language, as "phonetic types produced by a power inherent in human nature." I have given in these several passages his own words, for the simple reason that I was utterly unable to comprehend their meaning, and so could not venture to translate them into words of my own. This however may safely be said, that the result, as stated at the close of his last chapter, is in direct contradiction to what he had himself suggested in the whole tone of the argument which ran through his first chapter; and one cannot but think that his final conclusions must have been intended for the class of people so well described by himself (p. 364); those "who prefer the unintelligible which they can admire to the intelligible which they can only understand."

But I am not the only person who fails to comprehend such dealings with the philosophy of language. A writer in the '*North American Review*' (Oct. 1867, p. 521),* said to be a distinguished professor of Yale College, and at any rate one of those who look upon Bopp with no little "admiration and gratitude" as the founder of the science of Comparative Philology, gives his opinion on the question in a very straightforward manner: "A notable example of his (Prof. Max Müller's) characteristic weakness is offered in his theory of phonetic types produced as the beginnings of human speech." And again: "Rarely is a subject more trivially and insufficiently treated than is that of the origin of language by Müller in the last lecture of the first series."

The other theory as to the origin of language to which I cannot but refuse my assent, is that advocated by Harris, the author of '*Hermes*,' viz., that the meaning of language is derived from compact. No doubt this theory of arbitrary signs is in itself thoroughly intelligible. The signal-flags or -flashes of a fleet, the red and green lamps of our railways, the oscillations of the needle in a telegraph office, owe their value entirely

* The authorship is now acknowledged in Professor Whitney's '*Oriental and Linguistic Studies*.' (New York, 1873, p. 208.)

to a previous understanding; but the explanation is utterly without solidity for oral language, inasmuch as we cannot easily imagine a man possessed of sufficient authority to dictate such arbitrary laws, or indeed, in the yet non-existence of language, ^{able} to make his wishes known. Add to this the consideration that the absence of all natural connection between the significant sound and the thing signified would render it more difficult both to acquire and to retain a language so constituted. Be this as it may, if another mode of giving a first existence to language can be suggested, which shall be free from these difficulties, it has the better claim upon our assent; and especially if it be of a simple nature, for simplicity is the general characteristic of true philosophy.

Now it is all but universally admitted that some portion of language owes its origin to an imitation of the sounds of nature. The *moo-cow* and the *baa-lamb* of the child, the *cuckoo*, the *peewit*, the *whip-poor-Will* of N. America, and the *tuco-tuco* of S. America, are simple but irresistible examples of this law. But here one is at once met by the objection that though such an origin is readily conceived in the case of giving names to living creatures, or to those acts which have their special noise, as scratching, thumping, hissing; yet how can provision be made for terms which belong to the other senses, as for example that of the eye, and still more for the conceptions of the mind?

The best answer to such an objection is the simple answer of examples. Now when a stone tied to a string is whirled violently round, the ear catches very distinctly a sound which we may represent by the utterance of the noise *whirr*, and the more so, if we roll out the final liquid. Such a sound, especially if accompanied by a circular movement of the hand, would serve as a natural symbol of the idea of revolution: but more than this; the sound is one which actually plays a part in existing languages, and that to an extent which to my mind is irresistibly convincing. For example, the German has *wirr-en*, to twist, the French *virer*, the English *veer*, as the weathercock, and to *wear* (a ship). The same sound forms an important part of *whirl*, *whorl*, *world* (the round globe), *warp*, *worm* in the double

sense of the wriggling creature so-called, and the helix of a screw, *wort* in the sense of root, as spider-wort. It is also heard in the initial letters of *writhe*, *wreath*, *wrench*, *wrest*, *wrist*, *wring* (a towel or a bird's neck), *wriggle*, *wrap*, *wry*. The Latin exhibits the same in *uertere*, in *uermis* a worm, in *uerminari*, which unites the two meanings 'to breed worms' and 'to writhe with pain'; both uses, however different in their application, involving the idea of turning. The adj. *uarus* 'with crooked legs,' and *uarices* 'varicose veins' have the same origin. But the sound of whirling often passes from the rough liquid *r* to the softer and more musical *l*. Accordingly we find in Greek *φελ-ισσω* and *φελ-ιξ*, *φελμινς* 'a worm, etc., and in Latin *uol-uere*, *ualua*, *uulgus*; and again in English *wheel*, *wallow*, *welter*; while the German possesses both the simple vb. *wall-en* 'to roll,' and the secondary vbs. *walz-en* and *walg-en*. So far we have had words which we write with a commencing *w* or its near relative a *v*.

But often the first consonant is a guttural or dental. Thus, in the first place we have in Latin with a complete variety of vowel *cardo* a hinge, *ceruix* one of the vertebræ, *circus* a circle, *corona* a wreath, and *curro*, which in my contention meant 'to revolve' before it meant 'to run with progressive motion,' as in Catullus's: *Currite ducentes subtegmina, currite fusi* (64, 327), in Virgil's: *dixerunt currite fuis* (B. 4, 46), and in Horace's: *currente rota cur urceus exit?* Nay the sb. *currus*, which we commonly translate a chariot, meant originally a wheel, and so the poets are justified in their habitual use of this word as a plural in speaking of a single chariot. Hence too *curuus*. Add to these the Lat. *crines* with its Eng. equivalent *curls*; also *crick* in the neck and its dim. *crick-et*, in which the original weapon had more the form of a hockie-stick than a bat, together with *crook* and *crooked*, *croquet*, *crochet*, and the musical symbol called *crotchet*, which again has the figure of a hockie-stick. The Scotch adj. *crum* 'crooked' and our diminutival verb *crumple* belong to the same category. Then with an initial dental we have *ταρ-ισσω* 'stir round,' *τερετρον* a boring instrument, *τειρω* 'rub,' an action commonly of circular form, *τερσομαι*

'wipe,' a meaning which grows out of the preceding idea, *τερμα* 'the turning-point of a race,' etc., and so = *τελ-ος* an end; *τρεπω* and *στρεφω*; Lat. *tero* 'turn (on a lathe) or rub,' *terminus*, *terebra*, *teredo*, *tornus* 'a lathe' (= *τοπος*); *torqueo*, E. *throw* (as throwing silk), and *torques* a twisted chain; also, *turba-re* 'to stir round,' and *turbo* 'a whirlwind;' together with our own *stir* and *turn* itself. Again as the *w* in *wrench*, *wrest*, etc., is commonly silent, to the same root probably belong our ring, ringlet, roll, reel, the Lat. *rota* and *rotundus* growing out of older lost forms *uor-ota* and *uor-otundus* = *uortundus*; also *restis* and its Eng. equivalent rope, for such produce is the result of twisting; just as our *thread* (G. *draht*) is a derivative from *throw* (G. *drehen*); and again as the noun *funis* (*σχοινος*) of Latin meant in itself only a rush, it originally required the epithet *tortus* to represent a rope, as in Virgil's: *tortós incidere funis* (A. 4, 575); and in Horace's: *tortum ducere funem* (Ep. i. 10, 48).

But so far we have for the most part only physical ideas represented by our assumed root and its derivatives, in which all can be clearly explained by sound alone. I pass to ideas of a visible character. The three English words *vermilion*, *carmine*, and *crimson*,* which deal with the sense of sight, owe their origin to a noun which in Latin appears as *uermis*, in Sansk. as *krimi* 'a worm,' for the coccus of the East, like the cochineal of Mexico, was known to commerce only in its dead form, and under the name *kermes* passed for a dried worm. Indeed the Lat. *uermiculus* already carried with it the notion of scarlet alike in St. Jerome's letters, 64, 19, and in the Vulgate, Exod. 35, 25, where again the Hebrew has *toláhat* in the same sense of scarlet, yet a word strictly meaning a worm. Under the influence of a similar error the same little creature is called *granum* already in Plin. 9, 141; as also in Chaucer (v. 16,932), and several times in Shakspeare, as Mids. N. D., 1, 2, and the 'Comedy of Errors,' 3, 2; and hence our verb *ingrain* of thorough dyeing.

I take another example of mimetic language. The sound

* See Marsh's Lectures.

kar, *χαρ*, or something like it, is a general accompaniment of the act of scratching; and so we find in Latin the phrase *car-ĕro lanam* 'to card wool,' together with *carpere lanam* in the same sense, and also the derivative *carmen* for the artificial instrument used in the process, as also *carduus* or teasel, the instrument which nature furnishes. In German too this is called *krämpel*. Our own term *card* also contains the same sound. Then again we find in Greek *χαρ-ασσω*, *χαρ-ακτ-ηρ*, *σκαριφω*, by the side of our own *scar*, *scratch*, and *scrape*, Norse *scratta*, old-Scotch *scrat*, G. *kratzen*, F. *gratter* (our *grate*) and *égratigner*; also the Greek *γραφω*, G. *graben*, L. *scribo*, Dutch *krabbelen*, and old-Eng. *scrabble*, as in 1 Sam. 21, 13.

But to return to the Latin *carere*. A leading object in carding wool is to cleanse it from impurities. Thus Varro (l. l. 7, 3) says: *carĕre (lanam) a carendo, quod eam tum purgant ut careat spurcitia*. We see then at once how the notion of pure and chaste belongs to the so-called adjective, but rather participle *castus*, which stands to *caro* as *ustus* to *uro*, as *gestus* to *gero*; and again how the secondary verb *care-o* obtained the negative sense of 'being without,' for a clean plate is that which has nothing in or on it. Were I to go through the whole list of words which I regard as derivatives from the mimetic root *kar* I should run to a wild length, and so must be satisfied with a reference to the Trans. of the Philolog. Soc. for 1867, p. 375.

It may be objected to what has just been said that this mimetic theory labours under a serious difficulty, inasmuch as the very same sound *kar* occurs in *cardo* of the first series. But this ambiguity is at once corrected by aid of visible language, as it is easy to have an accompaniment of the hands moving in a circle in the one case, and of the nails pretending to scratch in the other. Moreover it is especially the habit of the less educated, of those but little used to language, to avail themselves of gesticulation; and how effective such language may be is well seen for example in the farce of 'Boots at the Swan,' where the deaf waiter, after repeated misinterpretation of th

orders of the two hungry travellers, is brought to a clear understanding when one of them goes through a dumb show, affecting to cut his food and lift it to his mouth and eat it; and the waiter finally expresses his satisfaction by the simple words "That I call grammar." A still clearer impression as to the power of visible speech in assisting the ear is seen in the wonderful art of the ventriloquist. Writers who contend for the mimetic origin of language have for the most part failed to urge sufficiently this use of visible signs as a standing commentary on vocal imitation.

It may then be safely affirmed after the evidence supplied by the term *vermilion*, &c., and the Latin *castus* and *carēre*, that the mimetic language of sound has in it a power to represent ideas that belong to the sight, to morals, and even to negation.

And now I ask, what is there to be said against the theory? The opponent whose name is most familiar at the present time to English readers is the Professor of Comparative Grammar at Oxford; and his one argument against the mimetic theory, if it be an argument, is the title he has been pleased to give it, "the bow-wow theory." Those who first cast their eye on this phrase would naturally suppose that it was intended to convey a sneer, but he has since assured the world that this was far from his intention. Setting then this aside, I take as a test of the merits of his own view and of that of some Indian philologist as compared with the mimetic explanation, the word *crow*, L. *corvus*, Greek *κορ-αξ*, and S. both *kāka* 'crow' and *kārava* 'raven.' An Indian author, he tells us, derives *kāka* 'crow' from *apakālayitarya*, i.e. "a bird that is to be driven away;" but he adds that Yaska, another grammarian, considered *kāka* to be in imitation of the bird's note. Professor M. Müller then gives his own etymology of the S. *kārava* 'raven,' deducing it from the S. vb. *ru*, to which he ascribes "a general predicative power" as expressive of sound "from the hardest to the softest," and so applicable "to the nightingale as well as to the raven, nay even to the barking of dogs" and "the mooing of cows." In a note however he hesitates between this etymon and one from the S.

káru 'singer.' To the special honour of this last derivation, the raven seems to be about as well entitled as the parrot or peacock; and the derivation from *ru*, a general term implying sound, would probably be regarded by the legal mind as void for uncertainty. Those who have heard the note of the crow will probably give a preference to the theory of Yâska, especially as Pott has thoroughly established the doctrine that the final syllable of the Greek *κορ-αῖ* is simply a suffix of diminutival power. It is in fact one with the suffix *ow* of our *sparr-ow*, *swall-ow*, and *cr-ow* itself, and in meaning one with the suffix of the G. *sper-ling* and Eng. *star-ling*.

Lastly let me call in evidence what I find in the 'Cratylus' of Plato, a treatise which, while it is made up for the most part of matter to which no reasonable man would now give his assent, has occasional glimmerings of good sense; as at the close of § 422: Suppose, says Socrates, that we had no voice or tongue, and wanted to communicate with one another, should we not, like the deaf and dumb, make signs with the hands and head and the rest of the body?—*Her.* There would be no choice, Socrates.—*Soc.* We should imitate the nature of the thing; the elevation of our hands to heaven would mean lightness and upwardness; heaviness and downwardness would be expressed by letting them drop to the ground; and so on. And then Socrates goes on to infer that: A name is a vocal imitation of that which the vocal imitator names (Jowett's 'Plato,' vol. i. p. 695). Nor am I deterred from this appeal to what is put in the mouth of Socrates by the fact that he is subsequently made to reject his own inference.

A passing word may well be given to the case of reduplicated words, which perhaps more than any others are commonly regarded as of mimetic origin, as the Greek *καρκαίρω* 'shake,' *μπαμπαίρω* 'flash,' *γαργαίρω* 'swarm;' the Latin *susurrus* and *tintinnabulum*, the E. *wishy-washy*, &c. Among the less cultivated races this habit of repetition is markedly prevalent, as in the river *Biobio* and the lake *Titi-caca* of S. America, and the S. American rodent already mentioned, the *tuco-tuco*. But if we desire to see the fullest play given to the principle we should

open a Maori dictionary, where we should find nearly every verb, substantive and adjective, so formed.

But if this view of the origin of oral language be universally true, it will follow that the first development of language was the formation of verbs, and indeed of active verbs of a physical character, seeing that by such action alone can noise be produced. This proposition is in no way opposed to the assumption that *moo-cow* and *bow-wow* owe their names to this principle, for the words *moo* and *bow-wow* denote first the act of lowing and barking, and then give a name for the beings that low and bark. It should here be observed that by the term 'active verbs' are meant not merely transitive verbs so-called as *strike* but equally the intransitive as *walk*, *run*, to the exclusion of all verbs denoting a mere state whether of body or mind, such as *stare* 'to stand,' *habere* 'to have,' *scire* 'to know.'

This doctrine, which assigns a sort of primogeniture to the verb, is strongly confirmed by the Arabic, which expresses the grammatical idea of a verb by a word which means in itself 'action' (De Sacy's Gr. § 245). Similarly the Chinese (Endlicher's Gr. § 219) denotes the same idea either by *sing-tsé* 'living words,' or *ho-tsé* 'words of motion;' whereas for nouns the terms in use are *ssè-tsé* 'dead words,' or *tsing-tsé* 'quiescent words.' Precisely in agreement with this the terms *uerbum* of the Latin and *ῥημα* of the Greek, although etymologically they signify merely that which is spoken, are in practice limited to the verb; and so imply a marked supremacy for this part of speech. Thus Varro (l. l. 8, 4; p. 400 Sp.): Aristoteles orationis duas partes esse dicit, uocabula et uerba, ut Homo et Equus, ut Legit et Currit.

Nor do I see much force in the argument of an able writer in the 'Proceedings of the Philological Society' (vol. iii. p. 163) that in many languages the same word is used alike for a verb and an abstract substantive of kindred power; as in Coptic, to take an example of his own, *ti* signifies indifferently a verb

'give' or a sb. 'giving,' so that with a pronominal affix there occurs *ti-k* 'giving of me,' and with the further addition of a demonstrative pronoun we find 'giving of me this' in the sense of 'I give this.' When this writer gives to such a form as this Coptic *ti*, so used as a substantive, the title *nomen actionis*, he really concedes all that is asked, for there cannot be a better definition of a verb, as I would use it. There is no contradiction in calling a word at once a verb and a noun so defined. The ordinary infinitive *facere*, for example, is at once a verb and a noun; and again in such a phrase as: *Quid tibi istunc tactio est?* (Plaut. *Cas.* 2, 6, 54) *tactio* though justly called a noun is still a verb, and so, like a verb, is entitled to an accusative.

Not a little support for the doctrine now maintained exists in the fact that the moment the idea of feeling is to be represented, the older forms of language exhibit an antipathy to the simple personal verb; and there commonly results one of three or four varieties, the use of an impersonal verb, or of a reflective verb, or of a passive verb, or of a perfect tense, as in Latin *pudet me eius*, *tacet, paenitet*, etc.; or again *uereor, misereor, reminiscor, obliuiscor, patior*, etc.; or *terreor, delector*, etc. Take again *noui*, I know, the imperfect tense of which denotes an act, 'I look at,' 'I study;' *nosce teipsum* 'study thyself;' so *memini* is lit. 'I noticed,' and hence remember; so too *odi* seems to imply a simpler *ōd-o* 'smell,' akin to the noun *odor*. The connection between the two ideas may perhaps be found in the metaphorical phrase: "he stinks in the nostrils of men." Then in Greek we find *δοκει* and *δει, αγαμαι, ελπομαι, μεμνημαι*, the last at once a reflective and a perfect. Then for modern languages we find in German *es gereuet mich* 'I repent;' *es friert mich* 'I am chilled;' *es ahnet mir* 'my mind forebodes;' *es ekelt mir* 'I loathe;' *es träumt mir* 'I dream.' So in Swedish there are to be seen as reflective verbs *hopp-a-s* 'to hope;' *blyg-a-s* 'to blush;' *trifv-a-s* 'to thrive;' *afund-a-s* 'to envy.' But our own tongue deserves our first attention. We now say 'I think,' 'I like,' 'I fear,' 'I remember,' 'I repent.' The older forms were 'methinks,' 'an't like your Grace' ('Measure for Measure,' 5, 1); 'his countenance

likes me not' ('Lear,' 1, 1); 'I'll do it but it dislikes me' ('Othello,' 2, 3); 'tush, tush, fear boys with bugs,' *i.e.* with bogies ('Tam. of Shr. 1, 2); 'her wits I fear me are not firm' ('Meas. for Meas. 5, 1); 'how I may be censured something fears me to think of' ('Lear,' 3, 5); 'thou but remember'st me of mine own conception' ('Lear,' 1, 4); 'and now I am remembered, scorned at me' ('As you Like It,' 3, 5); 'I do repent me that I put it to you' ('Othello,' 3, 3); 'I can again thy former light restore, should I repent me' (5, 2); and in the Bible: 'it repented the Lord that he had made man.' In fact in the old language, 'to fear' meant 'to frighten,' that is an act, and we still have in vulgar parlance 'I am afeard.' So 'to like' was 'to give pleasure,' 'to remember' was merely 'to remind.'

Another proof that the verb of action belongs to the earliest state of language is found in the brevity of form which characterises this class of words. Thus the Latin so-called third conjugation contains the leading verbs which denote the simplest action, and so should have had precedence of the first and second as well as of the fourth conjugations, all of which consist with rare exceptions of secondary verbs, and in fact correspond to the so-called contract verbs of the Greek Grammar, those in *αι, εαι, ου*. In these the stem is at least disyllabic, for *δα* 'put,' and *ι* 'go,' do not really belong to the *a* and *i* conjugations. But the distinction is best seen in those cases where there happen to be related words, one of the third or simple conjugation, the other with a disyllabic stem ending in a vowel, as *sċd-* (*seido* or *sċdo*), 'take a seat, sit down,' *sede-re* 'remain seated, sit,' *cumb-ere*, 'throw ^{one's} ~~th~~ *h*ysself down' (as in *proc.*, *rec.*, *inc.*), *cuba-re* 'lie'; *iac-ċre* 'throw' (a stone, &c.), *iacċ-re* 'lie' (as the result of the act); *ten* (*tend-ere*), 'stretch, strain'; *tene* 'hold with a tight grasp'; *cap* 'catch, take'; *habe* 'hold,' have.' In fact the secondary or vowel verbs which end in *i*, *e*, *a*, *o*, or *u* seem to denote in their origin a succession of acts, as *frica* 'rub,' *laua* 'wash,' *mica* 'glitter,' *spira* 'breathe,' *uola* 'fly,' *horre* 'shudder,' *sorbe* 'suck,' *morde* 'bite,' or rather 'crush,' *farci* 'cram,' *sali* 'run' or 'leap,' *audi* 'hear,' *hauri*

'draw (water, &c.),' *uolu* 'roll,' *acu* 'sharpen,' *flu* 'flow' (for *fol-u-ere*, a secondary verb from *fūd* of *fundo*). The simpler verbs from which these were deduced often vanished from the later language; but traces of the fugitives are at times visible; as in *fricui* and *frictus*. So *lauēre* was preserved by the poets, and also implied in *lautus*; so too *sonēre*. The part. *scriptus*, *morsus*, *haustus*, &c., the perf. *scripsi*, *hausi*, *uēni*, the sbb. *spiritus*, *halitus*, and *saltus* ('a cattle run'), all testify to the previous existence of simpler stems ending in a consonant.

The one main argument which may be opposed to the views here put forward is in the doctrine favoured by many grammarians that all sentences ought to be reduced to the logical form, consisting of a subject, predicate, and copula. That this view of language is all-important for the syllogism, and consequently for argument, is admitted; it is not admitted that the first object in the formation of language was argument. Earlier and more pressing objects were, to enunciate facts and to give commands.

In truth the process by which a logician forces (for it is often sheer force) every sentence into his favourite form, so as to exhibit the so-called substantive verb, is altogether artificial; and not a little harm has been done to grammar by regarding language too much from the logician's point of view. Thus we find De Sacy in his 'Grammaire Arabe' (tome 1, § 246) expressing himself thus:—

"Le seul verbe, qu'on puisse regarder comme absolument nécessaire à l'expression des jugements de notre esprit, c'est celui qu'on nomme *verbe substantif* ou *abstrait*, tel que *esse* en latin, *être* en français. Celui-là seul ne renferme précisément que ce qui constitue essentiellement la valeur du verbe, l'idée du sujet avec relation à un attribut."

Now there is not an idea more difficult of distinct comprehension and definition, even to the most highly educated, than that which is denoted by the term 'existence.' Indeed the verb 'to be' may well be called 'le verbe abstrait' by De Sacy; but an abstract term, however essential to a system of metaphysics,

is among the very last that are called for under the wants of uncivilized society. The savage has his various terms for the several concrete forms of existence, and of action, which of course involves the idea of existence, but has no occasion for a general term; and in fact those who attempt to translate the language of a nation far advanced in civilization into the language of a rude tribe, find an insuperable difficulty in words of this class. Thus, the authoress of 'A Residence at Sierra Leone' in Murray's Colonial Library, found the natives wholly unable to follow the use of our substantive verb, and was compelled at last to substitute *live* for *be*, before she could make herself intelligible. "Go fetch big tea-cup, he *live* in pantry," was the kind of language she found it necessary to employ; and the servant, in announcing dinner, would say, "Dinner live on table."

But on this point we may be satisfied with the evidence of one whose extensive acquaintance with the most outlying languages made him the best of witnesses; and in the present matter his authority is the weightier, as his feelings were directly opposed to the doctrine of the verb as here advanced, so that he could not be suspected of any too favourable bias. In vol. iv., p. 99, of the 'Proceedings of the Philological Society' Mr. Garnett writes: "We may venture to affirm that there is not such a thing as a true verb-substantive in any one member of the great Polynesian family." Again, in p. 236 he expresses his belief that "a verb-substantive, such as is commonly conceived, vivifying all connected speech and binding together the terms of every logical composition is much upon a footing with the phlogiston of the chemists of the last generation." De Saey also, although, as we have seen, he lays down the doctrine that the verb *to be* is the only essential verb, yet in the paragraph immediately following admits that there are languages which dispense with this one essential verb: "Il y a des langues où cette idée de l'existence du sujet et de sa relation à un attribut ne s'exprime pas par un verbe." See also tome 2, § 90. Nay, in Arabic itself, he goes on to say, it is the more common practice to omit it. This too is the habit of Sanskrit, and not unknown to the classical languages. In Hebrew too the non-use

of the word is apparent to the reader of the English bible in the fact that the translators, while inserting *is*, *was*, &c. as necessary to our own idiom, write them in the italic character, as not found in the original. Of this in the first chapter of Genesis there are eleven examples.

Now when we put together the several considerations that the logical form of language is not that which adapts itself to the wants of early society; that the substantive-verb so called is not even requisite for the expression of logical ideas; that the idea of being in the abstract is beyond the comprehension of a savage; and lastly that in point of fact a large number of existing languages do not possess such a verb, surely it is highly unphilosophical to construct a theory of language on such a basis.

But there still remains a difficulty to be disentangled. It has been truly laid down that the most irregular verbs of a language are the oldest; and it may be safely affirmed that of all verbs the most irregular is that which signifies to be, as is seen in *be*, *am*, *is*, *was* of our own tongue, in *esse*, *sum*, *fui* of Latin. The solution of the difficulty is found in the fact that *esse* had for its oldest meaning 'to eat' and not 'to be.' The idea of eating is of course ever before the mind of the savage, simply because the fear of starvation is too constant a condition of his life, and so may well claim an early place in his vocabulary. Nor is it difficult to see how from 'to eat' comes the idea of 'to live.' Nay, in the older writings of the Latin language the verb *uiuere* itself is used with all the vagueness of *esse*, as in *lepidus uiuis*, 'you are a dear good fellow,' of the 'Trinummus' (see Wagner's *Aulularia*, v. 417); and in the second place it must have first meant 'to eat,' being in origin the same word with *uesci*, to eat, for the French verb *vivre* has for its perfect participle *vécu*, *vescu*. Here the loss of the *s* is visible, and the passage from *e* to *v* is of the commonest. Indeed *uizi* has resumed the guttural, and *uictus*, 'food,' besides this has preserved the original meaning; as also has the French *vivres* and our own *virtuals*.

But the rejection of the logical view of early language involves

of course the rejection of the ordinary definition of the nominative as the subject of the proposition. If the original verbs were limited to those which express action, a necessary consequence would be that the nominative denotes the agent. It has been already stated that in Arabic the generic term for a verb is a term which in itself means action. So again De Sacy (tome i. § 188) says: "Dans les propositions verbales les deux parties constitutives de la proposition sont le verbe ^{فعل} فعل (F'il) et l'agent ^{فاعل} فاعل (Fa'il)."

This definition of the nominative, as really meaning agent, enables us to meet what has been thought to be a grave difficulty. A linguistic paper by Carl Bock, published in 12mo. at Berlin in the year 1845, under the title 'Analysis Verbi,' drew attention to the fact that in some languages the personal suffixes of the so-called nominative exhibited the form of genitives; and Mr. Garnett's paper, to which reference has just been made, produces other examples of the same apparent anomaly. But the moment that the idea of an agent or cause attaches itself to the term nominative, the difficulty vanishes, since the leading meaning of the genitive is the source whence, *calor solis*, 'the heat from the sun.' Already in the last century Markland in a note to his edition of the 'Supplices' suggests that the nominative case is but a shortened form of the genitive through the omission of the vowel, *rex* a contraction from *regis*. But it may be asked why then the genitive is limited to nouns, the nominative to verbs? In the first place, in such constructions, as *pudet me eius*, we have a genitive with a verb. But it is enough to say that when a word has assumed two forms, it is of ordinary occurrence, recommended too by utility, to assign a special and distinct duty to each. The question has been considered in my Essays, p. 184; and to what is there said I may add from Ahrens' paper on Greek Feminines in ω (Trans. Ph. Soc. vi. 162): "There is nothing surprising, if two forms originally identical, but already at a very early age separated from each other, should have met with different applications."

But to this treatment of the nominative, G. F. (*i. e.* I believe the well-known scholar Mr. George Ferguson) in a review of my Latin Grammar in the 'Classical Museum' (No. xv. p. 109, 1847), opposed the objection that the nominative as used with a passive verb, is a patient, not an agent. In No. xix. of the same work, p. 57, I met this objection by the doctrine, already put forward in my grammar, that the passive grew out of the reflective verb, in which the nominative asserts its original power; and I further pointed out that the passive construction in reality confirms the theory, for when we compare the two equivalent constructions, *dominus serum occidit* and *seruus a domino occiditur*, *dominus* and *a domino* in different forms express the very same idea, the whence of the action.

Yet another argument in favour of the present doctrine is furnished by the laws of syntax. Let us pass from the whence to the whither, from the source of an action to the object upon which it is directed. In *dominus serum occidit*, 'seruum' is in the accusative case, that is the very case whose special province it is to denote 'the whither.' Thus Varro (Ling. Lat. 8, 6) expressly defines the accusative as answering to the question *quo*, 'whither.' It agrees too with the use of the same case in *eo Romam*, *eo lauatum*, with the use of *in urbem*, 'into the city,' as opposed to *in urbe*, 'in the city,' with the Spanish practice of inserting the preposition *á*, 'to,' before the objective case. But this construction in the older stages of language seems to have been limited to verbs of action. When we pass to those verbs which speak of the external senses or of the mental feelings the construction is altered. With the 'verba sentiendi,' as the Greek grammars state, the genitive is usually and naturally preferred to denote 'the whence the noise, the smell, &c., proceed'; and if an exception be made in the case of verbs of seeing, it is because here the act of directing the eyes upon the object is commonly essential to the result, so that the recipient of the impression by his own action contributes to the result. Then again with personal verbs, Plautus has *fastidit mei*, 'he takes a dislike to me;' Afranius, *quae non ueretur uiri*, 'who has no respect for her husband;' Virgil uses a genitive with *mirari* and

laetari; Horace has, *Neque ille Sepositi ciceris nec longae invidit arenæ*; and even Cicero was not afraid to say *studet tui*. So in English Shakspeare has: "Or else you like not of my company" ('Taming of Shrew,' ii. 1); "I am your husband if you like of me" ('Much Ado About Nothing,' v. 4); "thou dislik'st of virtue" ('All's Well that Ends Well,' ii. 3). Thus the light which the theory of the mimetic origin of language in so many ways throws upon the laws of syntax is in my mind a very strong argument in its favour.

The doctrine that interjections have contributed to the formation of language is thoroughly consistent with what has been said, so far as we have here the imitation of natural sounds; but this doctrine has been in my opinion extended beyond its proper limits. I fully agree with Mr. Wedgwood in much that he has put forward; especially when he says (Proc. of Ph. Soc. ii. 115): "The cry forced from us by a sharp pain is well represented by the German *ach*, our *ah*, *oh*; from whence we have *ache*," and so on. Let me add that we have here probably the origin of the many words in Greek and Latin which are formed from a base *ak* with the sense of 'sharp'; and on the other hand the origin of the suffix *ak*, so well known in Greek, as in *λθαξ*, *μναξ*, *ἵπαξ*, &c., for which, as I have already said, Pott has placed beyond dispute the claim to the meaning of 'little.' And I request attention to this the more, that in what I have to say no suffix plays a more important part in the formation of secondary verbs, substantives, and adjectives.

But to return to Mr. Wedgwood's views. I have little doubt that he is right when he says that *ugh* is a natural interjection 'expressive of cold or horror,' and deduces from it our adjectives *ugly* and *ugsome*, together with the Scotch verb *ug* (*hounge*), 'to feel abhorrence,' as well seen in his quotations, especially that from Hardyng, where an abbess having cut off her own nose,

"counselled all her systers to do the same,
To make their foes to hounge so with the sight."

Again as he says (p. 116): The interjection *jie!* *pfui!* is in all probability the physical effect of disgust at an offensive

smell, which makes us close the passage through the nose and expire strongly through the compressed lips—*faugh!* and hence the Icelandic sb. *fui*, ‘putridity,’ with the adj. *full* = E. *foul*, and our secondary adjective *fulsome*.

On the other hand he seems to be reversing the stream of derivation, when in his ‘Dictionary of Etymology’ under the word *sow* he writes: ‘The name seems to be taken from the cry to call the animal to its food; Ober D. suck! Norfolk, sug! &c. I should hold that we have here the vocative of the noun, just as we have a vocative in the ‘chick chick’ of the housewife when distributing barley to her poultry.’

Lastly a considerable number of the so-called interjections will be found, as I hope to show, to be but the imperative of verbs, often greatly abbreviated, as the E. *wo*, the Gr. *εἰα*, the Latin *proh*, *vah*, *heus*, *en*, *ecce*, *ohé*.

Another point where error greatly prevails is the confounding a new application of an old word, with the creation of a new one; and nowhere does this error more abound than in Plato’s dialogue on language, entitled the ‘Cratylus.’

I conclude then with the expression of a strong opinion that original language is mimetic,* in other words consisted solely in the imitation of natural sounds, nor am I deterred from this conclusion by what I readily admit, that in a very large number of cases we are still unable to explain the rationale of the selection. Meanwhile, I look in vain for any other tenable theory

I conclude this chapter with a sort of corollary. The examination of the facts of language has a strong tendency to bring us to the belief that the first significant sounds were monosyllabic; and I do not rely alone on the evidence of the Chinese and other so-called monosyllabic languages. In the Latin language for example we are to a great extent led to the same conclusion. It is true that *cense-re*, *meti-ri*, *senti-re* of

* The word onomatopoeia is objectionable from its very length; but this word supplies an argument in favour of the mimetic theory, inasmuch as its author in so using it assumes that the only mode of word-making is by imitation.

disyllabic formation are the simplest forms for the imperfect tenses that occur; but we may safely assume older lost roots *cen*, *men*, and *sen*, when we look at the perfect forms *cen-sus*, *men-sus*, *sen-si*, and the sbb. *centrum*, *mentor*, *sensus*; and this view receives confirmation from the comparison of kindred forms in other languages, as the Homeric $\epsilon\kappa\epsilon\nu\sigma\alpha$, and the German *sinn-en*, 'to feel.'

But here we seem to find a formidable exception in the Semitic family, as the Arabic and Hebrew, where it is maintained that all ultimate ^{Verbs} words are disyllabic and contain three consonants. Nay some Continental scholars have carried their theory of Hebrew roots to the extreme point of denying to them the possession of any vowel, so that *ktl* for example is according to them the root of a class of words signifying 'kill.' Such theorists seem to have forgotten that spoken language has a priority over written language; yet surely if they would picture to themselves the time when Hebrew was not yet written, they would find themselves in a *reductio ad absurdum*, when declaring that to be a root which is confessedly unpronounceable. No doubt in Hebrew as we now have it the vowels are very variable, and by that variety introduce a distinct modification of the meaning, so that *kótél* for example denotes 'killing' and *kátúl* 'killed.' The Greeks too have a similar variety of vowel in *ρεμω*, *ρομος*, *ρομαιω*; and our own tongue yet a greater variety in *bind*, *bend*, *band*, *bond*, and *bundle*; but this has not led writers to speak of the root syllables as having the form *vm* or *bnd*.

Perhaps the right explanation of the alleged trilateral form of roots of Hebrew is, that we have here a comparatively late form of the language; and this seems the more probable as we have a parallel case in Hindostani, where the native grammarians again lay down as a general law that the simplest verbs, as in Hebrew, are disyllabic; yet the modern character of such a formation is at once established by our knowledge that the great body of this language has descended from the Sanskrit, and in Sanskrit the monosyllabic form of primary words is generally accepted. Our own language again is rapidly assuming a similar character in this respect to Hebrew and Hindostani,

seeing that the verbs *bellow*, *reckon*, *listen*, *open*, *begin* have pretty well usurped the places of the now all but obsolete verbs *bell*, *reck*, *list*, *ope*, *gin*.

But we must not at once assume that because a word is of one syllable it is a root word. Nay, when such a word begins or ends with two consonants, the safer assumption is that it has been compressed from some disyllabic form and so is a secondary word. Thus *sta* of the Latin *stare* is for *set-a* and the root syllable virtually exists in *sisto*, i.e. *si-set-o*, a reduplicated verb like *gigno* (*gi-gen-o*), *γίγνομαι*, *μῦνω* (*μι-μεν-ω*), *πιπτω* (*πι-πετ-ω*); and here we see the explanation of the fact that *sta-re* 'to stand' is not like *sistere* 'to stop,' a verb of action. So our *know* is a corruption of a fuller *kon-ow*, the simple form of which still lives in *con* and *ken*; while *bring*, i.e. *ber-ing* is a derivative from *ber* the essential part of the vb. *bear* = the Lat. *fer-o*; and *pluck* = *pol-uck* from *pull*. In these instances we have two initial consonants. But *hark*, *talk*, *walk* have been deduced from simpler verbs, *hear*, *tell*, *wall*, the last of which still survives in the German *wall-en** 'to go,' itself all but obsolete, while the suffixed *k* probably stands for a fuller *ock* or *uck*, which adds to the root notion of these words the idea of iteration, as in *pluck* by the side of *pull*; but of this afterwards.

Again, there are not a few verbs which simulate the monosyllabic character, owing to their having undergone decapitation. Thus to *low* as an ox is but a shortened form of *bell-ow*, to *run* a shortened form of a lost *hirn* or *hurn*, from a root *hur*, the analogue of the Latin *eur* (*curro*), *hirn-an* still existing in A. Saxon, as well as *hern* or *hurn* in the Dorset dialect. But of this again afterwards.

Again, the apparent root syllable will at times be found to have once had a fuller form, though still monosyllabic. Bopp, for example, among his examples of root-verbs in Sanskrit, gives us *va* 'blow' and *an* 'blow,' not being aware, it would seem, that these are both of them corrupted forms from a fuller stem *ran*, both consonants being still preserved in the Germ. *wann-en*, in the Latin *uannus* 'a winnowing-fan' and *uentus*, and in our

* "Wallen zum Hause Gottes," Ps. 42, 5 (4).

own *wind*, *winnow*, and with a slight change in *fan*. But the Greek, while it has retained the final nasal in *αἴμος* 'the wind,' has the root cut down to a mere vowel in the reduplicate verb *α-η-μι* and the sb. *αἷη*. Φα at first sight seems the ultimate form of the Greek *φημι* and the Latin *fari*, but *φαι* of *φαίνω* 'show' is probably the same word with an earlier meaning, seeing that the Latin *dico*, *deico* 'say,' (stem *dec*) is evidently one with the Greek *δεικνυμι* (stem *δεκ*) 'show.' Some writers hold *βα* rather than *βαν* to be the base of *βαίνω*, *τα* rather than *τεν* that of *τείνω*; but I think without reason. In the same language I look upon *θες* rather than *θε* to be the essential part of *τιθημι* (i. e. *τι-θεσ-μι*); cf. *θεσμος* and what I hold to be its Latin analogue, *ser-* 'put,' whence *ex-sero* 'put out,' *insero* 'put in,' *desero* 'put down.' Again in Latin *da* of *dare* is exhibited more accurately in the archaic *dan-unt*; and our own ordinary verb *go* in the Scotch variety *gang*. So too *i* of the Latin verb *i-re* has lost a final *t*, as shown by the noun *it-er* (compared for suffix with *tub-er*, &c.), by the sbb. *ex-it-ium*, *in-it-ium*, and by the numerous forms like *equ-it-*, *ped-it-*, *al-it-*. But besides this an initial consonant has been lost by it, as proved by the forms so common in Plautus, as *per-bītere*, *ad-bītere*, etc.; and the simple vb. *baetere* 'to go' has of course its stem in the syllable *bāt*, as *caedere* in *cād*; and this form *bat* is no doubt an analogue of the Greek *βαν*, and at the same time only a variety of the *uād-* whence *uādo*; and thus we have an explanation of the fact that the French language unites a future *i-rai* with a present *vais*, *vas*, *va*.

CHAPTER II.

VOWELS AND VOWEL-ASSIMILATION.

So far we have had to deal only with roots, which it is believed are always monosyllabic in form, and indeed monosyllables of a simple form, never having more than one initial or one final consonant. The next question is how from such monosyllabic roots secondary words are deduced. Here we have, I believe, the result of agglutination, the added element being in itself a root-word with its own definite meaning, at least in the outset; but now that it surrenders the privilege of accent to the main root, it is liable to careless pronunciation, and, as a natural consequence, to mutilation.

That a suffix may be in itself a root, is perhaps best seen in the grammatical formations of Chinese. Thus this language possesses a verb *téi* in the sense of '*proficisci*, set out,' says Prémare; but if suffixed to a substantive it adds to it the notion of a genitive case, which is another name for 'the whence.' For example, from *min*, 'people,' and *lǐ*, 'power,' they have *min-téi lǐ*, 'the people's power.' So Prof. M. Müller (Lectures, p. 221) tells us that *y* in Chinese is a root meaning 'to use,' but when attached as a suffix to a noun, it produces the instrumental case, and this is thoroughly intelligible. 'Beat donkey, use stick,' is one way, and a very simple way, of saying 'with a stick.'

But in the process of forming words by agglutination of significant monosyllables, discordant consonants are often brought into juxtaposition, and the increased difficulty of articulation, which results from this, often leads to a modification or even destruction of one of them. But even between the vowels of two consecutive syllables, though not in immediate juxtaposition, a

want of harmony at times offends, simply because, as in the preceding case, it involves an additional effort in pronunciation, as will presently be explained. Hence as we have what we call assimilation of consonants in the one case, so we have assimilation or a tendency to assimilation of vowels in the other. And as the latter modification rarely meets with due attention, I propose to give it precedence in our present inquiry, and so begin with a statement of linguistic facts as affecting the vowels.

When the eye running over a map of the northern parts of Asia comes in succession across such names as Kamtchatka, Okhotsk, Aldan, Vilini, Vitim, Angara, Tougous, Yenisei, Sourgout, Tobol, Irtysh, Ishim, and Sibir, the town now forgotten that gave name to Siberia;—when in a passage through central Asia, it finds Kara-Korum, Yarkand, Kashgar, Kokonor, Lhasa, Hitchi, Ladak, Koondooz, Ili, Samarcand, Balkach, Aral, Ararat; together with the nomad races called Mongol, Tatar, Kirghiz, Kasak, Kalpach;—when off the coast E. and S. of Asia there occurs a series of names, Japan, Kioussiou, Loochoo, Hong-Kong, Feejee, Palawan, Sooloo, Celebes, Saráwak, Sambawa, Samarang, Balambangan, Lombok, Banca, Java, Malacca, Andaman; followed by Madagascar and the Comoro islands;—when in eastern and north-eastern Europe we meet with Astrakhan, Simbirsk, Kazan, Moscow, Novogorod, Grodno, Lemberg, Walach, Widdin, Warsawa, Memel, Revel, and Stockholm; and when such forms have their parallel beyond the Atlantic in Mississippi, Tennessee, Alabama, Appalachi-an, Arkansas, Huron, Erie, together with Oronoco, Paraná, Paraguáy, Chili in the south; and again Woolloomooloo in Australia—one cannot but admit the tendency to the employment of the same or similar vowels in the consecutive syllables of a word; and the fact admitted, the why is a fitting subject of inquiry.

Vowels again have the stronger claim upon our attention in that they constitute the chief element of oral language, for the true consonant called a mute is not the sound itself but an accident thereof, the mode in which a sound begins or ceases, the fracture or cleavage so to say. At any rate with a final mute the sound ceases, for the channel of speech is for the

moment closed. Yet most writers on linguistics have given, I think, insufficient attention to the physiology of the vowels; and some have allowed themselves to be led astray so as to give their thoughts more to the symbols of vowel-sound than to the sounds themselves. Thus because the sounds of *e* and *o* are at times in written language represented by the union of two symbols *ai* and *au*, a practice which was universal in the Gothic notation and at times plays its part in Sanskrit, French, and English, an undue precedence has been hastily allowed to the other vowels; and phrases at times are met with which seem to imply that *e* and *o* partake of a diphthongal character because they are occasionally represented by diphthongs. Even Grimm, when speaking of the vowels in general (D. G. i. p. 5), confines the honorary title of pure vowels (*reine Vocale*) to *a*, *i*, *o*, *u*, to the exclusion of *e*. Again the alphabet which prevails in Europe having but five symbols has led many to speak of these as the only vowels; while others, somewhat less restrained by the accidents of outward form, have endeavoured to ascertain what the full number of vowels may be, as though they admitted of enumeration. Of necessity the symbols for vowel-sound must be limited; but this must not be allowed to hide from us the fact that the sounds themselves are simply infinite, the passage from the one to the other of the few which have a special notation being by imperceptible gradations. In short, to define precisely the number of vowels is a problem akin to that of determining the number of points that make up a finite line.

The language of sound is a branch of physical science, and physical science never reaches its full development until the philosopher enables us to quantify. In the important department of vowel-sound the Jacksonian professor in the University of Cambridge, more than forty years ago, placed the study on its true basis in two successive papers, read before the Cambridge Philosophical Society and published in their 'Transactions.' The dates of the papers are November 24, 1828, and March 16, 1829. What he wrote was reproduced in the German language in Poggendorff's 'Annalen der Physik und Chemie.' Unhappily these papers seem not to have attracted the attention they

leserve from the students of language, partly perhaps because the 'Transactions' in question have not a wide circulation, and partly because they appeared in a publication devoted chiefly to physical science, and for that reason not likely to catch the eye of those who deal with language. Even German scholars, so commonly accustomed to treat a subject in an exhaustive manner, seem for the most part to have left Prof. Willis's papers unconsidered. Grimm and Bopp alike give no sign of having seen them; and in fact Dr. Bindseil, so far as I have been able to discover, is the only student of linguistics in Germany who has so much as mentioned Mr. Willis's papers; and he but refers to them in his 'Abhandlungen zur allgemeinen vergleichenden Sprachlehre' (Hamburg, 1838), p. 84; and then proceeds as though they had no existence. From these two papers I propose to make some quotations, and to abridge more or less other parts which bear upon the present inquiry.

"The generality of writers," says Prof. Willis (p. 231), "who have treated on the vowel-sounds appear never to have looked beyond the vocal organs for their origin. Apparently assuming the actual forms of these organs to be essential to their production, they have contented themselves with describing with minute precision the relative positions of the tongue, palate, and teeth peculiar to each vowel, or with giving accurate measurements of the corresponding separation of the lips and of the tongue and uvula, considering vowels in fact more in the light of physiological functions of the human body than as a branch of acoustics."

After verifying and subsequently modifying the experiments which had formerly been made by Kempelen, Prof. Willis was in the end led to the construction of a very simple apparatus. Adjusting together a succession of cylindrical tubes which ran upon each other like the joints of a hand-telescope, he placed at one end a socket with an organ-reed fitted to it, through which air was thrown from a wind-chest, the said chest and reed performing the parts which in the human body belong to the lungs and the *chordæ vocales* of the larynx. Thus there was nothing to represent the tongue, palate, or teeth. The

object of the shifting cylindrical joints was of course to secure the means of lengthening or shortening at pleasure the tube through which the air passed on quitting the reed.

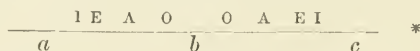
The results, which, as will be seen, partly depended upon the musical note of the reed, are described by Prof. Willis in these words:—



"Let the line *abcd* represent the length of the pipe measured from *a*, and take *ab*, *bc*, *cd*, &c., respectively equal to the length of the stopped pipe in unison with the reed employed, that is, equal to half the length of the sonorous wave of the reed.

"Now if the pipe be drawn out gradually, the tone of the reed, retaining its pitch, first puts on in succession the vowel qualities I E A O U; on approaching *c* the same series makes its appearance in inverse order, as represented in the diagram, then in direct order again, and so on in cycles, each cycle being merely the repetition of *bd*, but the vowels becoming less distinct in each successive cycle; the distance of any given vowel from its respective centre points *a*, *c*, &c., being always the same in all.

"When the pitch of the reed is high, some of the vowels become impossible. For instance, let the wave of the reed = *ac*, where $\frac{1}{2} ac$ is less than the length producing *u*—



"In this case it would be found that the series would never reach higher than *o*; that on passing *b*, instead of coming to *u*, we should begin with *o* again, and go through the inverse series. In like manner, if still higher notes be taken for the reed, more vowels will be cut off. This is exactly the case in the human voice; female singers are unable to produce *u* and *o* on the higher notes of their voice. For example, the proper length of pipe for *o* is that which corresponds to the note *c''*, and beyond

* I have ventured to alter diagram No. 3 of Professor Willis's paper, believing it to be other than he intended.

this note in singing, it will be found impossible to produce a distinct o.

"In the following table the vowel-lengths in inches occupy the third column. For want of a definite notation, I have given in the second column the English word containing the vowel in question:—

I	See	·38 ?
E	Pet	·6
	Pay	1.
A	Paa	1·8
	Part	2·2
A°	Paw	3·05
	Nought	3·8
O	No	4·7
U	But	Indefinite
	Boot	

"I have found this table as correct a standard as I could well expect; for vowels, it must be considered, are not definite sounds, like the different harmonics of a note, but on the contrary glide into each other by almost imperceptible gradations, so that it becomes extremely difficult to find the exact length of pipe belonging to each, confused as we are by the difference of quality between the artificial and natural vowels."

I feel the less called upon to apologize for these long quotations, because they are necessary as a basis for many of the following remarks, and because I hope that they may induce the student in language to read the two papers himself, which concern him as much as the student in physics. But the experiment may to a certain extent be performed on his own mouth. He will there find that a retraction of the lips is necessary to produce the sound of the continental *i*; while a prolongation accompanies the utterance of *u*; and the natural position of the mouth with neither retraction nor protrusion gives *a*, which for that reason is first heard from an infant's mouth, and so earned its title to the first place in the alphabet. Or better still, let the experimenter imitate a cat in uttering

slowly the series of sounds represented by (*m*)*icaou*, and he will perceive that he is gradually lengthening the vocal tube. The creaking hinge of a door again often produces a similar effect.

As the results of Prof. Willis's experiments have all the precision and certainty of mathematical science, it would be strange if they did not furnish a clue to the solution of many linguistic problems. In the first place then we find in them an explanation of that identity of vowel-sound, or something near to identity, which characterizes the series of geographical terms which we just now enumerated. As the consonants are affections of sound which vary with the position of the moveable organs of speech (the tongue and lips) in relation to the fixed organs (the palate and teeth), and their production is independent of the distance between the extreme parts of the vocal apparatus, that is, between the *chordae vocales* on the one hand and the lips on the other, the speaker is naturally tempted to leave this distance unaltered in the utterance of any word. The due adaptation of the four organs just named for the production of the consonants calls for a sufficient effort, without that required for varying the length of the vocal tube. Hence the peculiar character of such terms as Mississippi, Tennessee, Alabama, Kokonor, Loochoo; hence also, where there is to be variety, a limitation of such variety in such words as Yenisei, Lena, Bokhara, and Huron, where the combined vowels appear from Prof. Willis's scale, *i, e, a, o, u*, to be neighbours. Of course there are names which violate the principle, as Ohio, Kentucky, Ontario.

But when in the agglutination of significant monosyllables to form what we may call compound words discordant elements present themselves for union, the desired harmony between the vowel sounds may be effected in several ways, by the adaptation of the vowel in the first syllable to the nature of that which follows, or secondly the converse, or thirdly by a mutual approach to some intermediate sound. It is by a modification of the first syllable for the most part that the object is attained in the German, Scandinavian, and Keltic languages. But changes in both directions present themselves in Greek

and Latin; and I may probably add in Sanskrit. But here I am unable to speak as definitely as I should have wished; because the author of the 'Vergleichende Grammatik,' as I have elsewhere observed, all but ignores this doctrine of vowel-assimilation. Thus it is only I believe when he passes from the Sanskrit (§§ 41, 42) to deal with the Zend that he notices some cases where the presence of a *y*, *i*, or *e* affects the vowel of an adjoining syllable, and in § 46 mention is made of a similar euphonic influence belonging to a Zend *v* (*w*). Thus a reader might have drawn the very incorrect conclusion that these are but peculiarities of the Zend.

On the other hand in the languages of Tartary, Turkey, and Hungary, as well as in those of Northern Europe and Asia, spoken by the Finns, Lapps, Ostiaks, &c., the suffixed syllable is compelled to take a vowel more or less similar to that of the preceding syllable. Hence in languages of this class we find suffixes to a great extent running in pairs, which with a common power have no other difference in form than the interchange of what are called strong* and weak vowels. Thus in Turkish, *kalpak*, 'a cap,' has nom. pl. *kalpak-lar*, but *év*, 'a house,' has nom. pl. *év-ler*; and again the datives pl. of these nouns are *kalpak-lar-ah* and *évler-eh*. Or to take examples from the Hungarian, the verbs *var* 'wait' and *ismer* 'know' form the following persons (Wékey's Grammar, pp. 33 and 38):—

<i>vár-ok</i>	I wait.	<i>ismer-ek</i>	I know.
<i>vár-unk</i>	we wait.	<i>ismer-ünk</i>	we know.
<i>vár-tok</i>	you wait.	<i>ismer-tek</i>	you know.
<i>vár-nak</i>	they wait.	<i>ismer-nek</i>	they know.
<i>vár-átok</i>	you waited.	<i>ismer-étek</i>	you knew.

* Different epithets are here used by different writers, as follows:—

i, e, (y, ä, ö, ü) a, o, u.

Rask (A.-S. Gr. § 24; § 33, pp. 21 and 24) soft hard

Dr. Guest narrow broad

Gaelic Society's Grammar small broad

Others as above weak strong

Grimm, vol. i. p. 5, speaks of *a i o u* as *reine* 'bright;' of *e ö ü* as *getrübe* 'dull.'

Nay, to such an extent is this law of assimilation carried out in Mongolian that the principle is turned to account in reducing the number of alphabetic characters. As the first occurring vowel of a word decides the character of those that follow, a common symbol is used in all syllables after the first, for *a* and *e*, a second common syllable for *o* and *ö*. (See Schmidt's Gr. p. 7.)

But in the Indo-European family of languages, as has been stated, it is usually the first of two syllables that adapts itself to the following. If we look to the German languages, the familiar modification called *umlaut*, 'change of sound,' is for the most part made in the direction of exchanging stronger for weaker vowels. Thus *a*, *o*, *u*, *au*, if followed by a syllable containing either *i* or *e* are apt to give place to *ä*, *ö*, *ü*, *äu*, in which symbols the two dots are admitted to be the corruption of an *e* (ϵ , afterwards mere dots, supplanting a letter like ϵ), and indeed *ae*, *oe*, *ue*, *ae* at length are often written.

One of the most interesting cases of 'umlaut' to be found in German is seen in the second and third persons of several so-called irregular verbs, as *schlaf-en* 'to sleep,' *du schläfst*, *er schläft*; *stoss-en* 'to push,' *du stößest*, *er stößt*; *lauf-en* 'to run,' *du läufst*, *er läuft*. But it may be asked why the same modification is not found in the other persons, *ich schlafe*, *wir schlafen*, &c., which also have a following *e*; and the answer is only to be found in the formation of the old German, where the suffixes of the several persons are: sing. 1 -*u*; 2 -*is*; 3 -*it*; plur. -*amēs*; -*at*; -*ant*—so that the only persons which by the weak vowel of their suffixes were originally entitled to the influence, are precisely those for which it is claimed.

In several of the examples now given, the weak vowel which was the original cause of the umlaut had already disappeared, as *er schläft* for *schläfit*. Similarly *thür* 'a door,' is justly regarded from the evidence of its modified vowel as a corruption of an earlier *thüre*. In the same way too we see the explanation of our own irregular plurals, *men*, *geese*, &c., for these are but abbreviations of fuller forms in which the true suffix of plurality contained a weak vowel. Nay this loss of the suffix is in some sort a consequence of the effect it has produced upon the vowel

of the preceding syllable, for that syllable by the very fact of its modified sound gives previous notice of the weak suffix which is to follow; and so renders the actual pronunciation of that suffix in great measure a superfluity. There is little doubt that in this way our noun *man* first formed, like the German, some such plural as *männ-er*, which passed through an intermediate *männe* to *män* or *mén*.

But it is not only the strong vowels *a*, *o*, *u* which are subject to the influence of the umlaut. In spite of the argument which Grimm has put forward (in vol. i. p. 82) I cannot but attribute to the same cause what occurs in the 2nd and 3rd persons of *brech-en* 'to break,' *du brichst*, *er bricht*; *ess-en* 'to eat,' *du issest* or *isst*, *er isst*; *gescheh-en* 'to happen,' *es geschieht*: for as already stated the earlier suffixes of these persons were *is* and *it*. In these cases the weakest of vowels in the suffix draws the preceding *e*, already weak, into the still weaker form *i*.

But while the weakening of stronger vowels under the influence of a following weak vowel is the ordinary phenomenon in German, the Norse over and above this abounds in examples where the suffix has a vowel of the strong order influencing a preceding vowel. Thus *kall-a* 'to call' has with it *köll-um* 'we call,' in which *ö* has a sound more nearly akin to *u* than *o* itself. This change is strikingly like the Latin and Greek habit of favouring a succession of the vowels *o* and *u*: ^{e.g.} *calamitas* but *incolumis*, *uertendus* but what is virtually the same word, *rotundus* or *rutundus*, *ara-re* and *apo-eiv* but *op-vσσ-eiv*. But to return to the Norse, *dreck-a* 'to drink' has a past-imperfect or rather preterite, sing. *drack*, but pl. *druck-um*, while the subj. owes to its suffixed *i* a form *dryck-i*. Similarly *dör* 'a spear,' itself no doubt shortened from a lost *döru* (compare the Gk. *δορυ*) has in its plural n. *derir*, ac. *deri*, dat. *dör-um*, gen. *dar-ra*.

Nay, the influence of the added suffix often extends through two syllables. Thus from the same verb *kalla* is deduced a past tense, which in the singular has for its first two syllables *kallað*, but taking a *u* in the three suffixes of the plural, presents us with: *ver kölluð-um*, *þer kölluð-uð*, *þeir kölluð-u*. Similarly among the adjectives the form *hagast* 'most handy,'

amar, the analogue of the Lat. *alter*, have for the dat. pl. *högust-um*, *öðrum*; and the sb. *andra* 'a wooden shoe' has pl. nom. *öndrur*. In these changes it may be observed that the nearer *a* is converted into a vowel sound identical with that of the suffix, while the preceding vowel is drawn but halfway from its original position towards that of *u*, as though the power of attraction varied inversely as the distance. Still more effective is the power of attraction in the instance of *ketil* 'a kettle,' which in the plural has nom. *kattlar*, ac. *kalla*, dat. *kötlum*, gen. *kalla* ^{if it does not vanish} ~~in which~~ ^{here} on the one hand a suffixed *a* strengthens the initial vowel of the noun from the weak sound *e* to its own form, and on the other the datival *um* draws the same sound one stage further, to a modified *o*.

It is by the twofold influence of assimilation, at once the strengthening of weaker sounds and the weakening of stronger sounds, that the Norse has a higher claim upon our attention in the present question than the German, which for the most part presents instances of weakening alone. Still in old German there occur occasional examples such as those quoted by Grimm, *wor-olt* in Otfried for *wer-alt* 'world,' and *wol-o* 'weal,' = A.-Sax. *wela*. Yet even here *wor* and *wol* are perhaps the older forms of the root.

But the advantage of taking Prof. Willis's order of the vowels for measuring the influence of vowel upon vowel is seen in the Keltic languages as distinctly as in the Norse. I shall confine myself for the most part to the Breton branch, taking my examples chiefly from the Grammar of Legonidec, some few from that of Grégoire de Rostrenen (12mo, 1738, Rennes). The formation of the plural for irregular nouns may be considered under four heads: as,

a. The weakening of a strong stem-vowel by virtue of a weak vowel in the suffix:—

<i>báz</i>	stick,	<i>bisier</i>	sticks.
<i>brán</i>	crow,	<i>brini</i>	crows.
<i>klóch</i>	church-bell,	<i>kleier</i>	bells.
<i>taró</i>	bull,	<i>tirvi</i>	bulls.
<i>falch</i>	scythe,	<i>filchier</i>	scythes.

<i>mab</i>	son,	<i>mipien</i>	sons.
<i>sach</i>	sack,	<i>scier</i>	sacks.
<i>ialch</i>	purse,	<i>ilchier</i>	purse.
<i>forch</i>	fork,	<i>ferchier</i>	forks

b. The weakening still further of a vowel already weak :—

dréd starling, *dridi* starlings. *léstr** boat, *listri* boats.

c. The modification of two syllables through the suffix :—

matez maid-servant, *mitisien.* *tar-gaz†* tom-cat, *tirgisier.*
kalvez carpenter, *kilvizien.* *énezt‡* island, *inizi.*

d. Modification of a preceding vowel or vowels through the suffix, followed by the loss of that suffix :—

<i>dant</i>	tooth,	<i>dent.</i>	<i>krochen</i>	skin,	<i>krechin.</i>
<i>iâr</i>	hen,	<i>iér.</i>	<i>louarn</i>	fox,	<i>lern.</i>
<i>garr</i>	goat,	<i>gerr.</i>	<i>manach</i>	monk,	<i>ménech.</i>
<i>troad</i>	foot,	<i>treid.</i>	<i>askourn</i>	bone,	<i>eskern.</i>
<i>oan</i>	lamb,	<i>ein.</i>	<i>bastard</i>	bastard,	<i>besterd.</i>
<i>méan</i>	stone,	<i>mein.</i>	<i>esqob</i>	bishop,	<i>esqebjen, esqeb.</i>
<i>duñrad</i>	sheep,	<i>déñved.</i>	<i>abostol</i>	apostle,	<i>æbestel.</i>
<i>ózach</i>	married man,	<i>ézech.</i>	<i>azroüand</i>	devil,	<i>ezrevéud.</i>
<i>krógen</i>	Hell,	<i>kregin.</i>			

In the last pair of examples no less than three syllables have suffered modification.

I next turn to the irregular verbs, and to these with a preference, as it is a general doctrine among philologists of the present day, and that with good reason, that the so-called irregularity of formation means only obedience to the older laws of language. The Breton verb *gall-out* 'to be able' is no doubt the representative of the Latin *val-ere*. Now the suffix of the future is *inn*, and this tense runs in double form : 1 *gell-inn* or *gill-inn*, 2 *gelli* or *gilli*, 3 *gall-ô* or *gell-ô* ; pl. 1 *gellimp* or *gillimp*, 2 *gall-ot* or *gell-ot*, 3 *gell-iñt* or *gill-iñt*. Here it may be observed that *gell* has to contend with a rival *gill* whenever the weak *i* follows, with *gall* whenever the suffix has a strong *o*. Into the suffix of a Breton perfect the syllable *iz* enters, just as *is* does

* Cf. Lat. *linter*.

† Lit. bull-cat.

‡ Cf. W. *ynys*, Sc. *inch*, Lat. *ins-ula*, Gr. *νησ-ος*.

in the Latin *freg-is-ti*; but it is only in the first person of the Breton perfect that this *iz* is preserved in its entirety. In the other persons the vowel *i* is lost. Thus we find for 'I could,' &c.: 1 *gell-iz* or *gill-iz*, 2 *gall-zond* or *gell-zond*, 3 *gall-az* or *gell-az*; pl. 1 *gall-zomp* or *gell-zomp*, 2 *gall-zot* or *gell-zot*, 3 *gall-zont* or *gell-zont*, where the vowel of the root-syllable is subject to precisely the same variations as in the future.

When the root-syllable contains the sound *ou*, the influence of a following *i* or *e* leads to the change of *ou* to *ue*; and this with reason, as a *w* before a vowel is the sound of *ou* reduced to its smallest dimensions, so far corresponding to the fact that a *y* in the same position is an *i* similarly reduced. Thus *well* = *u-ell*; *youth* = *ï-outh*, in which the sound of *ũ* and *ï* is so short that it does not count for a syllable. But the sounds are still vowel-sounds, and the Roman grammarians seem to have been in error when they gave them the titles of *u-consonans* and *i-consonans*. I take then a Breton verb which in its root contains the sound *ou*, viz., *gouz-out*; and here the present tense runs *gouz-om*, *gouz-oud*, *go-ar*; pl. *gouz-omp*, *gouz-och*, *gouz-ont*, in which the suffixes contain only strong vowels. But the perfect and future tenses begin with *gwéz-iz* 'I knew,' *gwéz-inn* 'I shall know;' and the past-imperfect has the vowel modified throughout: *gwi-enn*, *gwi-ez*, *gwi é*; *gwi-emp*, *gwi-ech*, *gwi-ent*. All the imperative mood too and the perf. part. *gwec-et* 'known' acknowledge the presence of the weak vowel in the suffixes by their adaptation to it. In this change of *gou* to *gwe* or *gwi* we have probably the explanation of the apparent passage of a *g* to a *w*, a change so common in language, for the next change of *gwe* or *gwi* to *ue* or *wi* by the omission of the guttural is of the easiest. In fact in Breton itself a *g* so placed is often dropped. Thus this very verb *gouz-out* has in subjunctive future (Leg. p. 137) *ra wezin* 'que je sache;' and its compound with the prep. *ana* has a fut. ind. *ana-rezin* 'je connaîtrai.'

But I must be permitted too to quote a few forms from the verb *lavar-out* 'to say,' because here we have the law of assimilation acting through two syllables. To pick out instances, we find in the conjugation of this verb *lavar-ann* 'I say,' *lever-ez*

'thou sayest,' *livir-it* 'yo say,' *livir-iz*, 'I said,' *livir-inn* 'I shall say,' *liviri*, 'thou wilt say,' *livir-imp* 'we will say.' But it must not be supposed that such extreme obedience to the vowel-law will be found through the whole of this verb as the language now stands. Still amid all the violations an *i* in the suffix is accompanied by an *i* throughout.

The table of irregular infinitives given by Legonidec (pp. 162, 3) in connection with the imperative and first person of the indicative is also instructive:—

<i>kréd*</i>	believe,	ind. 1 p. <i>kréd-ann</i> ,	inf. <i>kridi</i> .
<i>desk</i>	learn,	„ <i>desk-ann</i> ,	„ <i>diski</i> .
<i>méd</i>	mow,	„ <i>méd-ann</i> ,	„ <i>nidi</i> .
<i>berv</i>	boil,	„ <i>berc-ann</i> ,	„ <i>birvi</i> .
<i>gór</i>	brood,	„ <i>gór ann</i> ,	„ <i>gwiri</i> .

There are two points already dwelt upon which may receive illustration from the Gaelic branch of the Keltic, viz. the loss of a suffix after it has influenced, and because it has influenced, the preceding vowel, and the tendency of a *u*-sound under the weakening process still to retain a remnant of its original character in the form *we* or *wi*. Now the fullest form of the genitive suffix in Gaelic is *in*, as *bò* 'cow,' *bo-in* 'of a cow;' *cù* 'dog,' *co-in* 'of a dog' ('Gaelic Gr. of the Highland Soc.,' p. 7 b). This suffix *in* sometimes degenerates into a mere *e*, as *gleann*, 'valley,' *glinne* 'of a valley;' *sgian* 'knife,' *sgine* 'of a knife,' sometimes into a final *a*, but this only when the vowel of the stem is a strong one, as *lagh* 'law,' *lagha*; *roth* 'wheel,' *rotha*. Most commonly the whole suffix is lost. Still if the stem end in a consonant, the weakened vowel bears testimony to the previous existence of a suffix with a weak vowel, as *fìtheach* 'a raven,' gen. *fìthich*; *mac* 'a son,' gen. *mie*; *ceann* 'a head,' gen. *cenn*. Again, in many cases the *u*, *o*, or even *a* of the stem passes into *ui* or *oi*, as *clach* or *clach* 'stone,' g. *cloiche*; *cos* or *cas* 'foot,' g. *coise*; *clog* or *clag* 'bell,' g. *cloige*; *alt* 'a joint,' g. *uilt*; *car*, 'a turn,' g. *cuir*; *earn* 'heap of stones,' g. *cuirn*; *seòl* 'sail,' g. *siuil*; *neul* 'cloud,' g. *neòil*.

* Probably a loan-word. It is scarcely necessary to remark that we have here the Breton analogues of the Latin *cred-ere*, *disc-ere*, *met-ere*, *feru-ere*.

In our own language, as a sister of the German, some traces of this law of assimilated vowels may reasonably be expected; and indeed attention has already been called to the 'umlauted' plurals, as *men*, *geese*, &c. Other examples on this side are *mice*, *lice*, corresponding to *mäuse*, *läuse* of the German. In these examples the plural suffix has been in part curtailed; but in *brethr-en* and *ki-ne* the consonant of the suffix (*en*) has been preserved. In the case of *brother*, *breth(e)r-en*, the umlaut has affected even the antepenult. Not unfrequently too the strong or stronger vowel still continues for the eye, though not for the ear. Thus no true *o* is heard in *other*, *brother*, *mother*, *smother*. In *any* we write an *a*, but hear the sound which might be represented by *eny*. So in *Jemmy*, *Jem*, *Jenny*, *English*, *Green-wich*, *pretty*, the *e* does duty for a short *ĭ*; and even an *o* for *ĭ* in *women*, which Chaucer appears to have written with more correctness as *wymmen*. Examples for the whole gamut of vowels are seen in:—

gourd	gerkin.	four	firkin.
hood	hudkin.	corn	kernel.
food	fodder.	foal	fillie.
goose	geese.	John	Jenkins.
good	better (for gwetter).*	soam†	simmer.
one	any.	old	elder.
foot	fetter, feet.	frog (G. frosch)	fresher §
mouse	mice.	fox	vixen.||
louse	lice.	cock	chicken.**
thumb	thimble.	top	tip.††
much†	mickle.	knob	nipple.
touch†	tickle.	pipe	pipkin.
woman	women.	five	fifty.

* Cf. the Breton changes in *gouz-out gwéz-iz*, *gôr gwiri*.

† The *ch* of these words had no doubt a corresponding *k*-sound, cf. *church kirk*, *which wilk*.

‡ Soam in Jennings.

§ A Suffolk variety for a young frog. || Cf. Germ. *fuchs*, *füchsinn*.

** The change of a *k*-sound to *ch* due to the vowel *i*.

†† Cf. old Norse *topp-r* 'top' with a dim. *typpi* 'a tip.'

bite	bitten.	break	brittle (older brickle).
thrive	thrifty.	-let	little.
brass	brazier.	shake	shiver.
grass	grazier.	quake	quiver.
glass	glazier.	pray	prythee.
master	mistress.	Kate	Kitty, Kit.
Margaret	Meggie, Peggy.	Jane	Jenny.
Amelia	Emily.	James	Jemmy, Jem.
twain	twenty.	cat	kitten, kit.
Angle	English.	Green	Greenwich.

As the weak suffix often disappears after having effected the umlaut, so also the mere vowel alone of the suffix may disappear, as in *Wales*, *Wel(i)sh*, *France*, *French* (for *Frenk-ish*).

I must not quit the domain of the English language without a brief reference to Mr. John M. Kemble's interesting paper (Proc. Phil. Soc., vol. 4, pp. 1-10) on those names of English towns which contain the suffix *ing*, which I believe to be genitival and but a variety of the suffix *en*. In his list of such towns there occur instances of the modified vowel, as No. 125, *Bryn-ing-land*, from the proper name *Brun*; 199, *Hemingford*, and 200, *Hemington*, from *Hama*; 234, *Pædington*, from *Pada*; and probably *Twickenham* may mean *Mr. Tooke's home*; *Chippenham*, *Mr. Copp's* or *Mr. Cobb's*. That such names of places have their origin in the name of the first resident or owner is *à priori* probable from the fact, that the largest town must often have had a beginning in a single house or farm. Indeed the word *town* is even now used of a farm, though standing by itself. But, setting aside this general argument, we obtain from Mr. Kemble's paper historical evidence which in some cases places the origin beyond dispute. Thus *Wolver-ley* in Worcestershire was called *Wulferd-ing-lea*, and *Wulferd* is distinctly mentioned as its owner. Again, *Kemerton*, formerly *Cyneburg-ing-tún*, was once a religious foundation of the Mercian princess so named. Hence there can be little doubt that the geographical names *Reading*, *Lancing*, *Worthing*, are but genitives, meaning originally *Mr. Read's*, *Mr. Lance's*, *Mr. Worth's*.

I next pass to the classical languages, and first to the Greek. Here a friend pointed out to me the advantage of keeping in view Prof. Willis's vowel-order, when we are considering the laws according to which this language strengthens the short vowels of a root. Let the following tabular view (says he) be kept in mind :

οι)	ĩ	ε	η	ω	ου	ẽ	(ευ
	ĩ	ε	η	ω	ου	ẽ	(ευ
	ĩ	ε	η	ω	ου	ẽ	(ευ

Here the four diphthongs or long vowels which underlie the gaps that separate the short vowels are precisely those which are employed to strengthen them, each performing the office for the pair of short vowels which so adjoin it. It may be observed too that η seems to represent *ai*, and ω to represent *av*, the one or other being adopted according as the attraction lies in the direction of the weak or the strong vowels. The outlying forms, *oi* and *ev* (like our sounds *we* and *you*), may possibly owe their existence to another cause. If we wish to draw special attention to the sound *i* (of the continent) we cannot do better than prefix to it a small dose so to say of the vowel which belongs to the other end of the gamut; for the clear perception of vowel-sound, as Prof. Willis especially observes, is best felt under sudden contrast. On the same principle *ev* prefixes to the *oo* sound one derived from the weak end of the series. It is precisely in this way that we habitually prefix in pronunciation a *y* to words which begin with a long *u*, as in *union*.

The law of similar vowels shows itself in the m. *νομος*, but n. *νεμεσ-*, from *νεμω*; in m. *γονος*, n. *γενεσ-*, from *γεν* of *γεν(ε)νομαι*; in *στροφω* beside *στρεφ-*, in *νωμαω* beside *νεμ-*; and, as η belongs rather to the strong than to the weak vowels, in *νομη* and *γονη*. So *οροφος* and *οροφη* coexist with a vb. *ερεφ-*. Compare, too, *οροβος*, 'the vetch' so-called, and *eruum* (prob. for *ereu-om*), with old Germ. *araweiz*. When one finds an unmodified *κλεπτης* by the side of the modified *κλοπη*, one is tempted to ask whether the presence of two consonants may not have stopped the current of attraction.

In not a few instances it will be found that a following vowel has its character determined, as in the Tatar family of lan-

guages, by that which precedes. Thus, although *ασσ* seems to have been the original form of the suffix which, added to simple verbs, gives secondary verbs of probably an iterative character, yet this suffix has its vowel commonly adapted to that of the stem. Thus we find verbs which, already possessed of an *a*, had no antipathy to a suffix so formed, as :—

θα-ασσω	sit.	ανασσω*	rule.
ῥαβασσω (or αρ.)	make a noise.	κανασσω	gurgle.
ῥαθασσω = ῥαινω	sprinkle.	αρασσω	strike.
μαλασσω*	beat to softness.	μαρασσω or σμαρασσω = σμαρυγεω,	crash.
σταλασσω	drip.	σπαρασσω (rather -αττω)	tear.
ψαλασσω	touch a musical cord.	ταρασσω	stir round.
		χαρασσω	dig.
αλλασσω	change.	φ(α)ρασσω	fence in, cf. φαρξασθαι,
αίμασσω*	make bloody.		etc.
λαιμασσω	swallow greedily.	πλατασσω	slap.
		πατασσω	beat.
μαιμασσω	burst forth.	αφασσω = αφωω,	handle.
φαρμασσω*	drug.		

These words are all arranged alphabetically, according to the final letters,—a method of arrangement most serviceable for the philologist, in as much as it throws together words of similar ending, and so places before him words of similar formation. A vocabulary of the Greek language so arranged was found among the papers of the Dutch scholar Hoogeveen, and published at Cambridge in 1810, it is believed at the instance of Dr. Parr, under the title ‘*Dictionarium Analogicum Linguae Graecae.*’ Unhappily no authority for the words is given, and not a few are open to suspicion; at any rate are strangers to some of our best scholars. I may here note that feeling the want of such a work in the Latin language, I persuaded a friend (the late Mr. Walter Deverell) some forty years ago to undertake the labour of throwing into such reversed order the whole Latin

* I am not blind to the fact that allied nouns already possess an equivalent suffix in the forms *ακ* or *ατ*, as *μαλακο-*, *αίματ-*, *φαρμακων*, *ανακτ-*.

vocabulary. This he did by cutting up two copies of the translation of Forcellini's great work by Bailey, and pasting them in the new order. From the gigantic volumes so prepared another friend selected the leading word of each item, adding the name of one of the leading writers on whose authority each word exists. This folio manuscript I have used for many years, and, as I thought, with so much advantage, that I offered it to publishers in England and Germany to be printed at their cost and profit, receiving myself only a few copies; but this without result. Their fear of risk I regard as groundless, seeing that the book, containing not one word of English, was as available for all foreigners as for us.

But I return to our subject. In the examples so far quoted the vowel *a* of the suffix is in harmony with the preceding vowel or diphthong. There are of course exceptions, as *φυλ-ασσω*, for example, and *τινασσω*. Let us next look at words in *ισσω*. These are not numerous, but they confirm the theory of assimilation, as *δειδισσω*, *ελισσω* or *ειλισσω*, *μελισσω* or *μειλισσω*, and *πιτισσω*, which is already regarded by others as shortened from *πιτισσω*, and this on the sufficient evidence of the pl. noun *πιτυρα*, of kindred meaning. *Ερ-εσσω* is one of the very few verbs in *εσσω*; but in Lat. we find *petesso*, and with neighbour vowels *capesso*,* *facesso*, *lucesso*, from which come the compounds *expectesso* and *incipisso*, the latter falling into strict obedience to the law. The suffix *υσσω* is not very rare, and here we have *υορμυσσομαι*, *ορνσσω*, *μορνσσω* and *φορνσσω*, *κορνσσω* (by the side, it is true, of the noun *κορυθ-*). Forms in *ωσσω* seem to be but few, and these belong for the most part to the later writers. *Κνωσσω* indeed, 'nod' (esp. as one falling asleep), belongs to the old language, but unhappily has lost its root vowel. Its meaning however seems to suggest kinship with the Lat. *nuo*, for which, in my Essays (p. 68), I have claimed, as the original power, that of 'lowering,' of 'descent,' and this partly on the evidence of the Lith. *nũ* 'down,' akin to the S. *nĩ* 'down.' Let me

* The derivation of these three verbs, from *capere sino*, etc., disregards at once both form and meaning.

here add to the reasoning there detailed that the Plautian *con-quin-isco* 'crouch,' together with its fellow-compound *oe-quin-isco*, may well come from a stem *con* (as in my theoretic *κον-ωσσω*); this *con* passing into *quin* before the suffix *isc*. Further, I find in the Umbrian tables of Iguvium a prep. *hondra* 'below,' and a superl. *hondomo* or *hondomu* 'lowest,' opposed to *somo* (= *L. summo*-) 'highest' (see Umb. Sprach. of Aufrecht and Kirchhoff), which I cannot but claim as belonging to our root, and so akin to *E. under*, *G. unter*, rather than as connected with the *L. ulter* (*ultra*). The presence of a *d* offers here no greater difficulty than in our *yonder* and *beyond* by the side of *yon*, *G. jen-er*.

But if the forms in *ωσσω* be but few, the deficiency may for our present purpose be supplied by turning our thoughts to the five verbs in *ωσκω*, all of which, unfortunately, in the imperfect tenses again drop the vowel of the stem. But the lost vowel is not far to seek, for it reappears in allied tenses, &c. Thus the original *o* of *βλωσκω* 'go' returns to us in *μολουμαι*, *εμολον*, *αυτομολος*. *Γινωσκω* has been already dealt with; *βιβρωσκω* 'eat' has by its side a sb. *βορα* 'food'; *θρωσκω* 'leap' an aorist *εθορον*; while *τιτρωσκω* 'wound' is admitted to be akin to *τορω* 'bore.' Hence earlier forms must have been *μολ-ωσκω*, *γον-ωσκω*, *βορ-ωσκω*, *θορ-ωσκω*, *τορ-ωσκω*, in which the correspondence of the vowels is unmistakable.

In the Latin language I may first point to the changes in the declension of *is*, *ea*, *id*, in which the *i* gives place to the stronger *e*, whenever the next syllable contains a strong vowel, as *eo*, *ea*, *eum*. The same law holds in the conjugation of *ire* 'to go,' *it*, *imus*, *iens*; but if a strong vowel immediately follow without the intervention of a consonant we find an *e*, as *eo*, *eam*, *eunt*, *euntis*. Similarly the *uol* of *uolo* is apt to change its *ō* to *ē*, if the next syllable has an *i* or *e*, *velim*, etc., *uellem*, etc., *uelle*; and the so-called conjunction *uel* 'or' is probably a shortened imperative for *uele* 'choose.'* The adverb *bene* as contrasted with *bonus* obeys the same law; and the dim. *bellus* stands for *ben-el-us*.

Take again those suffixes of the Latin vocabulary which con-

* This explains not merely the use of the word in the senses 'or, either,' but also its use in the sense 'even,' as in *uel maximus*.

tain a *b* preceded by some vowel. We shall here find the selection of that vowel similarly influenced. Thus, while forms in *ab-ilis* are common, as *amabilis*, *arabilis*, we find *eb* preferred in *celeber*, *terebra*, *tenebra*, *scatebra*, *latebra*, *salebra*; *gem-eb-undus*, *frem-eb-undus*, *trem-eb-undus*; *ib* again in *ridibundus*, *cribrum* by the side of *cerno*, *τριβω* and *tribulum* akin to *tero*, *queribundus*. *Ob* perhaps only in *nobilis*, which has already been shown to have superseded a theoretic *gonobilis*; while *ub* is seen in *uolubilis*, *solubilis*, *lugubris*. *Saluber* presents a difficulty, but a difficulty which need not stop us, when we find *σαος* and *σωος* co-existing, to say nothing of *σωζω*.

Nubilis calls for more words. Of course *nub-ere* and *nub-es* are related words, 'a cloud' and 'a veil' performing much the same office. It may seem more strange if *umbra* be claimed as akin to them. And here the advantage to be drawn from the law of assimilated vowels as a guiding principle is distinctly seen. The affinity between the vowels *o* and *u* has been already dwelt upon, with the usual condition that the *o* is apt to precede its friend. Thus we have *οφρvs*, *ορνξ*, *μολνβδος*, etc.; but in not a few words the second of these vowels has vanished, leaving two consonants in juxtaposition. In our proper name *Humphrey*, for example, we happen historically to know that it has grown out of an older form *Onuphrius*, or, as the Italians write it, *Onufrio*. So the Latin *unguis* must have superseded an earlier *onuguis*, as *ορνξ* testifies; and then with the loss of the initial vowel we have *nag-el* in German, compressed into our own term *nail*. *Ομφαλος* again, *umbilicus*, together with *umbo*, in all probability grew out of fuller forms, *ονμφαλος*, *onubilicus*, *onubo*, which bear an unmistakable resemblance to G. *navel*, E. *navel*. The Gr. *ορχος* 'a vine trench' may well represent an earlier *ορ-υχ-ος*, which, like *ορνχη*, must go with *ορνσσω*. With the same verb I would connect the L. *urgeo* 'I keep digging' or 'nudging,' as standing for *ορνγ-εο*. The Latin *turba-*, whether vb. or sb., has probably been shortened from *tor-ub-a*, in which case we may class it with *θορνβος*, with *ταρασσω*, and *ταραχη*. The nouns *urbs* and *arx* are usually considered as unrelated words, and strange etymologies have been invented for them. I

assume for them uncompressed forms *orub* and *arac*, and believe them to be but varieties of the same word, a doctrine somewhat startling at first. But the Greek language, like the Sanskrit, loves to interchange aspirates, so that γ(α)ρ-αφ- (γραφω) and χαρ-αχ- (χαρ-ασσω) are substantially the same word, alike in root and suffix; but the Latin *f* and Gr. φ representing different sounds,* a Roman habitually substituted a *b* for φ, and hence (*s*)*cribo*. Then as to meaning, *urbs*, as opposed to *oppidum* (επιτεδον) ‘the flat town,’ must have been the citadel, which of course, if the ground made it possible, would be a rock: and this is exactly what *arx* meant, as in Virgil’s *celsá sedet Aeolus arce*, for our lexicographers, *si dis placet*, invert the order of meanings in dealing with this word. In fact, our own *rock* is the same word with *arac*-, both having been decapitated from a form still preserved in the Welsh *careg* ‘stone,’ and substantially in our *crag*. For the loss of the initial *c* comp. *alapa*, κολαφος, and the L. vb. *amo* by the side of the S. *kam*. I need scarcely add that the identity of *ταραχη* and *θορυβος* involves the same assumptions as my identification of *arx* and *urbs*. Lastly, *uxor* I regard as possibly representing an old *ocus-or* from a lost verb *ocuso* = *οπνω* (i.e. *οπνσσω*, for the assumption of which fuller suffix see below).

This is a long preamble, but I have given way to the digression, because it has an important bearing upon word-formation generally, and our present subject of vowel-assimilation in particular.

I now go back to the words *nubilis* and *umbra*. The Latin *umbra*, subjected to the same treatment as the other words of similar form, suggests a quadrisyllabic *onubera*, which bears a striking likeness to the Gr. νεφελη, L. *nebula* and G. *nebel*, so that we may now perhaps safely assume that *nubilis* has superseded a lost *on-ub-ilis*. Before leaving this discussion it may be well to point to the fact that while the Greek forms here brought into view exhibit a love for aspirates—γραφω, ορυχ-, ομφαλο-, ορχο-, ταραχη, νεφελη—the Latin and German throughout

* See Quint. i. 4, 14; and xii. 10, 29.

agree in a preference for thick consonants, *scribo*, *unquis*, *umbilicus*, *urgeo*, *turbo*, *schreiben*, *nagel*, *nabel*, *nebel*. In all comparisons of kindred languages and kindred dialects it is important to watch such laws.

To the words which exhibit a suffix *ab*, *eb*, &c., we may add for consideration those which give us a suffix *ac*, *ec*, &c., subject to the same law. Here I will merely write down *alacer* (akin to ἀλλομαι), *uerecundus*, *ridiculus*, *inuolucrum* and *uolucris*.

I conclude the chapter with a series which embraces the whole gamut of vowels and runs through several languages: G. *πᾶλλας* m. 'a young man,' and *πᾶλλακη** 'a young woman,' L. *paellex** 'a young woman'—both these fem. nouns being euphemisms for a concubine; *πῶλος* 'a young horse,' L. *pullus* 'a young horse' or 'a young bird,' E. *filly* 'a young mare,' Scotch *pollock* 'a young fish' or 'frog.'

* Cf. the similar euphemistic use of *ἐταῖρα*^{ειται'ρα} and the Sp. *manceba*.

CHAPTER III.

CONSONANTS.

THE term consonant implies that the addition of a vowel was needed to give it existence ; but in fact with a true consonant we have but the stoppage of all sound, inasmuch as the mouth and the *uelum palati* are both closed. The action should be considered under both conditions, viz., when the vowel sound precedes and when it follows the closing. The complete consonants—or as I would rather call them mutes—with us are *b, p; g, k; d, t;* and perhaps *v*; for with the aspirates, with the sibilants, as also with *r* and *l*, there seems to exist a vibratory movement which closes and reopens the aperture of speech in so momentary a succession, that the accompanying sound is practically continuous. The nasals, though commonly called consonants, have no title to the name, as with them the *uelum* remains open, though the passage through the mouth is closed. In the articulation of the words *cab, cap; lug, luck; bed, bet; love*, all sound is absolutely stopped at the close, simply because the air has no means of escape; still, on the tympanum of the hearer, the sound of the vowel in each case ends in a peculiar manner, according as the organs of speech in the mouth of the speaker stood to each other at the moment of closing. Then in articulating the words *bee, pea; Dee, tea; go, Co; veau*, the mouth is completely closed at starting; but here too the commencement of the vowel sound has for the hearer a distinction which it may be difficult to define, but which for him has its special quality, depending as before on the relative position of the organs which had just closed the passage. Thus, alike in the pronunciation of words beginning

or ending in a mute, the sound is perceptibly qualified. In the enumeration of the true consonants, a material point has been passed over. The pronunciation of a *d* and that of a *t* have been assumed as always the same ; but in fact the closing of the mouth expressed by these terms has a varying character, according as the tongue strikes the palate at the edge of the upper teeth or at a slight distance from them. To an untrained Englishman, the sound will probably appear the same, but not so to an Arab for instance, whose alphabet accordingly has two *d*'s and two *t*'s, so as to distinguish those which are formed close to the teeth, and called dentals, from those where the closing line is at some distance from the teeth. To the latter Sanskritists give the epithet 'cerebral,' a more suitable term, 'palatal' having been unfortunately pre-occupied for another use. As this distinction of the two *t*'s and two *d*'s is commonly disregarded in our English treatises on language, it may be well to impress it on the memory by further notice. A friend of the writer's went in early life as a missionary to Bagdad, and the neighbouring country, and in this capacity applied himself at once to the study of Arabic, in which he was at first thrown out by the difficulty of pronouncing, and still more that of appreciating, the sound of the two *t*'s. The first of these difficulties he got over under the instruction of the natives, learning to produce the cerebral *t* by directing his tongue to a part of the palate somewhat remote from the teeth ; and thus what he wished to say became quite intelligible to the natives. On the other hand, to the very last, he assured me, his ear was never able to distinguish the two sounds as uttered by others. Yet another little anecdote may illustrate the matter. A few years ago, Mr. Melville Bell, the well-known and able elocutionist, in a visit to the Common Room of University College for the purpose of explaining his peculiar alphabet, asked those present to utter any out-of-the-way sounds that they might select, as a test of the merits of his scheme. I took there-upon the opportunity of pronouncing the word *to-morrow*, with my tongue successively in the two different positions. Accordingly he took them down in his own characters, and the written paper was subsequently placed in the hands of a son of his, who

was in attendance in an adjoining room, but had no access to his father. The son then read the different writings, and among them the two sounds of *to-morrow*, which to my ear were indistinguishable, and on my saying so, he gave the real distinction; for the sounds were thoroughly appreciable to the ears alike of Mr. Bell and his son, and of course their alphabet gave them distinguishing symbols.

It will be seen on consideration that the cerebral *d* has for its field of action the same as that which belongs to the liquid *r*; and hence, no doubt, the tendency to interchange between the two sounds *d* and *r*, noticed by Bopp in his V. Gr. § 17*a*; as in Lat. *meri-dies* for *medi-dies*, and the Tahiti numeral *rua*, corresponding to the Sansk. *dva* 'two.' Other familiar instances are *καρυκκειον* and *caduceus*, *audio* and *auris*, *ad* and *ar*, and the E. *gramercy*. from *God have mercy*.

The division of consonants into gutturals, dentals, and labials goes far to exhaust the stock, but *f* and *v* run counter to the division, inasmuch as they blend the dental with the labial, arising as they do from a junction of the upper teeth with the lower lip.

So far no notice has been taken of the sibilants *s* and *z*; or of what in Sanskrit are called palatals, *ch* of *church*, for which an Italian writes either *c* before *i* and *e*, as in *cicerone*, or *ci* before a strong vowel, *ciascuno*; then *sh* of *shirt*, *ch* of Fr. *cher*, *sch* of Germ. *schön*; thirdly, *j* and *dg* of the E. *judge*, or the Italian *g* before *e* and *i*, as *giorno*, *gettare*; lastly, *j* and *g* of Fr. *juge*, for which we at times employ *zi* or *si* before a vowel, as in *grazier*, *hosier*; also a *z* or *s* before a *u* (pronounced 'you'), as in *azure*, *pleasure*.

And here questions of some difficulty arise: What was the sound of the Greek ζ, of the Lat. *g* before *i* and *e*, of the Lat. *i-consonans*? As to ζ, although the prevalent habit is to treat it as the equivalent of our own *z*, or of *ds*, yet I believe scholars are rapidly coming to the conclusion that it is rather the same with our English *j*; and this chiefly on the ground that it has often grown out of a fuller form δι, before a vowel, as in ζαπλουτος, ζατρεφης, &c.; and indeed δια in modern Greek has taken the

form $\gamma\alpha$ and ζ itself = Eng. *j*. But in our own country we have confirmatory evidence in the names of the towns *Bodiam* in Sussex, *Odiham* in Hampshire, called respectively *Bojam* and *Ojam*, just as a provincial pronunciation of *odious* gives *o-jus*.

But the L. *g* before *e* and *i* may put in a claim for the same power. First of all the sound of our hard *g* (*got*, *get*) cannot originally have belonged to it, seeing that this was the property at the outset of the third letter in the Latin alphabet, corresponding as it does in position to the Greek γ ; and indeed such remained its sound to the last in *Caius* and *amurca*. Then again, it can scarcely be an accident that *g* in the series of the Latin alphabet occupies the same place as ζ in Greek, as *zain* in Hebrew. Lastly, I think I see in the form of *g* as recorded in the Bacanalian inscription a compound character, made up of *c* (= *g*) and *i*, that is, of the very combination still used by the Italians.

I pass to the Latin *i-consonans*, as in *Iuppiter*, *iugum*. Here a pronunciation such as we denote by a *y* before a vowel (*youth*) is in general favour with our scholars, and finds strong support in the employment of a common symbol for the vowel *i* and the so-called consonant *i*; so the Greek vocabulary had not merely $\zeta\omicron\rho\kappa\alpha\varsigma$, $\zeta\omicron\rho\kappa\omicron\varsigma$, and $\zeta\omicron\rho\xi$ by the side of $\delta\omicron\rho\kappa\alpha\varsigma$, but also $\iota\omicron\rho\kappa\omicron\varsigma$; and the Teutonic family place before us *joch*, *yoke*, as the analogue of *iugum*. But there is much to say on the other side. The Greek *Zeus* and $\zeta\upsilon\gamma\omicron\nu$ cannot be torn asunder from the two Latin words just given. Again, as *Zeus* stands by the side of $\Delta\iota\omicron\varsigma$, so the earlier form of *Iuppiter* was *Diespiter*, or perhaps rather *Diu(v)-piter*. Then again, in Italian the forms are *Giove*, *giogo*. Those who contend for the *y* sound as alone known to the classical period, have to assume a two-fold change: first the passage of *di* (*de*) before a vowel into this *y* sound; and then the reverse action, the passage from the classical *y* sound to its original power in the Italian *gi*. I hold it to be a more reasonable conclusion that two concurrent pronunciations existed in the best age of Latin, the *y* sound favoured by the educated, the *j* sound still holding its own in some rustic dialect, so that its existence was continuous here after the first corruption in the so-called

more refined speech. The country people had little occasion for written language, while the higher class of society, having already passed into the second stage of corruption from a *j* sound to a *y* sound, had good reason for employing the symbol already in use for *i*.

The discussion about the Latin *u-consonans* runs parallel to that about the *i-consonans*; and I am disposed to take a similar view, that here too there were concurrent dialects—those of the higher education, with whom it lay to legislate as to writing, pronouncing the letter as a *w*, and so adopting for its representative the symbol which was doing duty as a vowel, *u*, while others around them retained a preference for what was a more original sound in the words under question, that of our *v*; and this at any rate has survived in the Tuscan of modern times.

There remains the relation which holds between *b*, *g*, *d*, on the one hand, and *p*, *k*, *t*, on the other, between *v* and *f*, between *j* Eng. and *j* Fr., between *ch* and *sh*, between *th* of *thee* and *th* of *thin*. The distinction between these several pairs is the same throughout, but is denoted in different writers by a great variety of terms. In our Greek and Latin grammars the terms employed are *medial* and *thin*; others say *soft* and *hard*; Dr. Guest employs *vocal* and *whisper*; others, again, *intoned* and *unintoned*; whilst the present fashion is to use *sonant* and *surd*—the last three pairs being founded on the same principle. My own practice is to speak of *thick* and *thin*, so that I retain the old term for the one class, but prefer to have opposite to it, what is its natural opponent, *thick*; and this because the two terms seem to me to characterize the action. The tongue and the lips, by their softness, admit of a two-fold action in closing the passage of the mouth. This may be effected by a broad intervening band of flesh, or by a narrow band approximating to a mere line. In pronouncing a thin consonant, the lips, for example, may be sharpened, so that the junction is little more than lineal, and the result a *p*; in a flabby state, and with heavier pressure, a considerable mass is brought into union, and the result a *b*. So the tongue with slight pressure against the teeth or palate, gives us

t or *k*; with a heavier pressure a *d* or *g*. The same with the other enumerated consonants. On this principle we have a reason why the negro, with his thick lips and thick tongue, is given to the articulation of thick consonants.

The relation between the leading consonants must have been before the mind of the person who gave the world its first alphabet, which we are told consisted of sixteen letters. Of course the Latin alphabet was borrowed from the Greeks, and it is expressly recorded that the Greek came from the Phœnician, and possibly that from Egypt. Thus Pliny (7, 192) hands down a tradition: "*Litteras . . . in Græciam intulisse e Phœnice Cadmum sedecim numero*," and he goes on to say which were the letters subsequently added; but in this part I believe his informers to have been in error. Plutarch (*Symp. lib. 9, quæst. 3, § 2*—in Wytttenbach's ed. 3, 1050) makes some addition to this: *Ἑρμῆς λέγεται θεὸν ἐν Αἰγυπτῷ γράμματα πρῶτος εὑρεῖν*—and soon after: *τα πρῶτα, καὶ Φοινικεῖα διὰ Καδμὸν ὀνομασθέντα, τετρακὶς ἢ τετράς γενομένη παρεσχέ*. The consideration of these two passages led me, just forty* years ago, to the suggestion that the said alphabet of four tetrads consisted of A B Γ Δ; E F H (as an aspirate) Θ; I Λ M N; O Π Ϙ T—where all is systematically arranged, each tetrad commencing with a vowel, and the several vowels followed in each case by a series of connected consonants: first the thick consonants, then the aspirates, then the liquids, then the thin consonants. Over and above this, in each series of non-liquids the order, labial, guttural, dental, is observed. But let us consider the letters that are omitted, and if possible account for such omission. That T should be the last letter is in agreement with the Hebrew alphabet, which already accounts for the non-appearance of Υ Φ Χ Ψ Ω. The place of Υ might well be supplied by O, just as in old Umbrian, which had no O (see A. K. Umbr. Spr. p. 16), its work was given to V. Ω again we know, like H as a vowel, came into use at a late date. Ζ and Ξ as compound letters could not have been entitled to a place in the original alphabet, and K may be

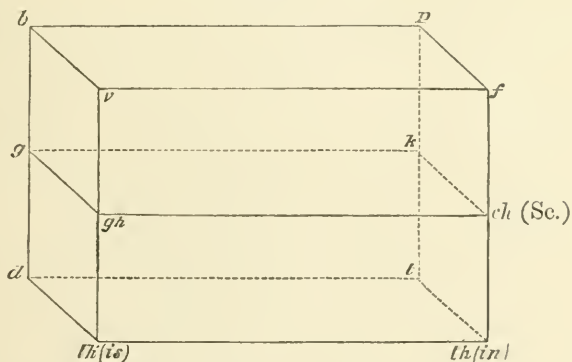
* In the 'Penny Cyclopædia,' v. Alphabet. I have added now, what I had then mislaid, a precise reference to the passage in Plutarch.

regarded as a superfluity for an alphabet already possessed of a Φ . There remain but P and Σ , the former of which might well have a substitute in Λ , just as the Chinese have no *r* and the Japanese no *l*; and indeed for the Polynesians generally the two sounds are indistinguishable. Lastly the symbol Θ may readily have been for some a *th*, for others a sibilant, especially with a race so given to lipping as the Greeks seem to have been.

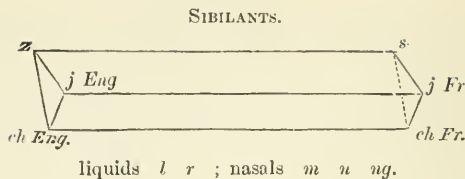
Let me further suggest that for teaching the A B C to children the Greeks may have employed a quadrilateral stick with its top cut off into a pyramidal form, so that one triangle of this pyramid had A upon it, with B Γ Δ on the rectangular side below it; the next triangle E, with F H Θ below it, and so on. In this case the pyramidal top would exhibit the four vowels A E I O; and one of the rectangular sides would have upon it the series of liquids. Now as a stick so arranged would have nothing to point out its commencement, the eye might just as readily fall upon Λ M N as the commencement; and thus it may have happened that the name of the alphabet was *el-em-ent-a** for one, while it was the *alpha-beta* for another. This is certain, that *elementa* had for its first meaning 'the letters of the alphabet.' Its use for constituent elements in general was of later date.

But it will be convenient to tabulate the alphabetic characters, as thus:—

MUTES.



* See Heindorf's (des Horatius Satiren) note on i. 26.



The parallel-epipedon, or in plainer language, the box, on its upper surface exhibits the labial consonants exclusive of the nasal *m*. The next parallel plane has the gutturals with the same exception, while the bottom of the box has the dentals. Then the back of the box contains the six leading mutes, the left side (as you look at it) has the thick consonants corresponding to the thin on the right side. Lastly the front of the box has the six aspirates.* Then in the prism the thick consonants are again on one's left and the thin on one's right. Thus the relation of the consonants to each other is presented in a simple form to the eye, which may enable a person to systematize those letter-changes which generally hold between two kindred languages or dialects.

* Sanskrit and its modern progeny possess many more aspirates than have been included in the preceding list, in which, however, if Sanskritists be right, there seems to be nothing really additional, that is if the letters represent only what we hear in the italicised letters of *blockhouse*, *loghouse*, *coachhouse*, *bridgehouse*, *carthouse*, *guardhouse*, *chophouse*, *clubhouse*.

CHAPTER IV.

ASSIMILATION OF CONSONANTS.

On this head I shall be brief, as the subject is for the most part treated at sufficient length in grammars of the Greek language and in the discussion of 'Sandhi' by Sanskritists. The junction of thin with thin letters, of thick with thick, of aspirates with aspirates in *ἔπτα* and *οκτω* as compared with *ἔβδομος* and *ογδοος*; in *γεγραπται*, *εγραφθην*, *επιγραβδην*, ^{τς} are too familiar to call for discussion.

Less attention has been given to the adaptation of the appropriate nasal to the adjoining mute in the L. *lambo* as compared with *lingo*; the Sard. *limba* with L. *lingua* (F. *langue*); the L. *lumbi* with the Germ. *leude*; *tempto* with *tendo*; *ambulo* with the Ital. *andare*; Sard. *quimbe* with *quinque*; Sard. *sambene* with *sanguis*; Sp. *hambre* (from *fames*) with Eng. *hunger*; Sp. *hombre* with Gr. *ανδρ-ος*; Fr. *gendre* with Gr. *γαμβρος*. In which words it should be observed that the *n* of *lingua*, *quinque*, *sanguis*, *hunger*, is not the dental *n*, though written as such, but that guttural nasal, for which our European alphabets have no special symbol, and which the Greek alphabet too somewhat clumsily represents by a *γ*, as in *αγκυρα*, *αγγελος*, *βρογχος*. Gellius was aware of the distinction when he spoke of the guttural nasal as *n adulterinum*.

But there is another point still more neglected, the tendency of our *n* to draw any previous labial (*p*, *b*, *f*, *v*) into the nasal member of the labial series. This change depends upon the action of the so-called *velum palati* or soft palate, by which the passage from the larynx to the nasal chamber is closed or left open at our pleasure, though we may be unconscious of the mode

in which such pleasure is called into action. During the utterance of *b d g, p t k, φ θ χ*, the velum is closed; but the moment it is opened, these pass respectively into *m, n, ng* (so to express the guttural nasal, as in the final of *ring, length, hang, long, tongue*). When a person is suffering from a catarrh, the flesh of the soft palate is at times so swollen that it is no longer in the power of the muscles to open the passage; and accordingly, when one so suffering wishes to ask, say a sister Minnie, to favour the company with some vocal music, his attempt to express the wish leads to something like, 'Cub, Biddie, sig us a sog.' A simple experiment will readily show whether speech is produced by a passage of the air through the nose or through the mouth. If a piece of dry glass is placed horizontally between the nose and lips, then when the *uclum* ^{is} be closed so as to shut out the passage of air from the larynx into the nasal chamber, the lower surface of the glass has its film of steam; if otherwise, the upper surface. Hence it is that under the congenital defect of the palate which has its outward mark in the hare-lip, the power of closing the nasal passage by the *uclum* is wanting; and the sufferer of necessity speaks through the nose and is unable to articulate the mutes. I proceed to deal with examples of this action of *n* upon preceding labials.

The Gr. *ἔπρος* has in its *π* the original letter of the word, if, as seems probable, *sop-or* be a kindred word; but the Latin writes *som-nus*.

The Gr. *δαπ-αρη* and the L. *dāpīn-are* of Plautus, together with the adj. *dapsilis*, and perhaps *dapes*, all point to a root *dap*, and this perhaps what is seen in the Gr. *δαπτω*; but again the Latin, bringing the *p* and *n* into immediate connection, prefers *dam-num*. Ritschl indeed (Op. 2, 709) regards *damnum* as an equivalent to *διδόμενον*, and indeed treats with no little contempt all other derivations, as "thörichte Träumereien und unmethodische Spiele-reien." He supports his doctrine by a reference to the Germ. *gift* 'poison.' But in the first place the leap from a gift to a fine or loss is too broad for an ordinary mortal to venture over; and secondly, *το διδόμενον* could not mean a gift, to express which a perfect participle seems necessary. Thus an imperfect *dabam*

signified 'I offered,' not 'I gave.' I have written *dapinare* with a short *i*, in opposition to Forcellini, who not only writes it with a long *i*, but quotes a line from the 'Captivi' of Plautus (4, 2, 116): "*Aeternum tibi dapinabo cibum si uera autumas.*" Fleckeisen has with reason substituted *uictum* for *cibum*, a change essential for the metre in either case. I suppose that Forcellini treated 'tibi' as a pyrrhic, or monosyllable, in which case the verse would require a long syllable, 'dāpinabo;' but not so if we read "*Aeternum tibi dāpīnabo . .*" or what Plautus more probably wrote, "*Aeniternum tibi dāpīnabo.*"

The Latin *amnis* suggests a search for *ap* in some cognate language, and the Sanskrit supplies what is wanted in *ap* 'water,' which has for its Latin equivalent *aq* of *aqua*, just as *S. lap* corresponds to *loq-ui*. Our own geographical term *Avon* confirms the theory. The form of *Avon* reminds me of our *Devon*, and then passing to the Latin I find *Damnonii* for the people of *Devon*.

The term *Sabini* has an intervening vowel between the labial and nasal; but let this vowel disappear, and we come to *Samnium*.

Scabellum by the side of *scamnum* at once tells us that the latter must have come from out of a fuller *scabīnum*.

In the 'Inscriptions' of Orelli (1175) we find one in which a parent excludes from the use of the family vault or sepulture a son who has misconducted himself. It has several differences from the ordinary forms of classical Latin; and the reason given for the exclusion is in the words: "*Quia me pos multas iniurias parentem sibi amnegauerit*"—where others would have written *abnegauerit*, but probably would have pronounced what the stone exhibits.

In Catullus's epithalamium for Mallius and Julia, the bride is invited to accept the honours of a grand establishment (*domus potens et beata uiri*) with a hope that she will enforce her full authority as mistress through a long life: *Quae tibi sine seruiat . . . Vsque dum tremulū mouens Cana tempus anilitas Omnia omnibus annuit*—so at least the printed texts run, and the explanation commonly given is: "Until old age with hoary

and palsied head brings with it the idiocy that gives an unmeaning yes to every one." But the best MS. (D) has not *annuit* but *amnuît*; and I am disposed to regard *anilitas* as a personification, so that the translation should rather be: "Until palsied Age deny to thee, as to all others, in like case, every kind of pleasure." This interpretation has in its favour the advantage that it gives a picture of old age which contrasts well with what precedes, as we say, "Make hay while the sun shines."

The Latin *omn-is* and the Gr. ἀπαν-* have much in common, both in sense and form, if the passage from *p* before an *n* to *m* be kept in view. But the received etymology of ἀπας deduces it from πας with a prefix = ἀμα; and it is held by some that ἀπας is of stronger meaning than πας. To this view it may be opposed that a corruption from the longer ἀπας to a shorter πας is quite consistent with the ordinary laws of language; but this would still leave the natural liberty of using the longer and earlier form as more appropriate where emphasis is called for. But there is yet another consideration which may assist us. The ideas of unity and union are intimately connected, as indeed these very words show. Again *simul* (*semul*) 'together' and *semel* 'once' are substantially the same word. To the same stock belong both *sim* of *simplex* and *sem* of *semper* 'always.' Again, *as* means at once 'one' and 'the whole,' and from it came the name of the card, as *l'as de pique* 'ace of spades.' So too our *al-one*, G. *all-ein*, combine the two words 'all' and 'one.' Lastly too *solus* meant at once 'alone,' 'solitary,' and 'the whole' (= *totus*, says Festus). With ἀπας then I cannot but connect ἀπαξ, regarding it as a shortened form of ἀπ-ακis, a form which is in thorough keeping with δν-ακis, τρι-ακis, πολλ-ακis. Pott, it is true, would derive ἀπαξ from ἀ = ἀμα and παγ of πηγνυμι; but I think he will not find many supporters. He who would separate ἀπαξ from δνακis, &c., will also have to separate our *once* from *twice*, *thrice*, &c. But if my derivation be true, ἀπ is the root-syllable of ἀπ-ας and αν only a suffix, corre-

* The τ I pass over as a mere outgrowth from the ν.

sponding probably to the suffix of the Latin *mag-n-us*, *plenus*, &c. It is highly probable indeed that the aspirate of *ἀπ-α* as well as that of *ἀμα* has grown out of a *σ*, so that the earlier root-syllable was *sap* or *sam*, which brings us to the G. *samm-el-u* 'collect,' *zu-samm-en* 'together;' and also to the large family of *semel*, *sim-ul*, *sim-ilis*, *sim-plex*, *sin-cerus*, *sim-itu* (= *sim-ictu** 'at one blow'), *sing-uli*, *singularis* (whence the Fr. *sanglier*). But a Gr. initial aspirate, though often originating in a *σ*, is always apt to vanish.† In modern Greek, though still written, an aspirate has long ceased to have any power, and the fact of its having passed into a mere supra-lineal mark in classical Greek suggests the question whether it had not even in those days become an unmeaning symbol. Thus I hold it to be not an over-bold theory that *ἀπav-* took in Latin the form *omm-* (for *op-on-*), especially as it was the habit of the Aeolic dialect, which has such close affinities with Latin, to substitute *o* for *α*.

On the Greek side, indisputable examples are *σεμνος* from *σεβομαι*, and *ερεμνος* by the side of *ερεβος*. *Ύφ-αινω* again has its root in the first syllable, as proved by the equivalent *weave* in English and *web-en* in German; but the neighbourhood of a following *ν* has led to a derivative *ἵμ-ην* 'a web;' and seeing that Homer habitually uses the verb *ἵφαινω* of weaving words, just as we have the terms *text* and *context* in the same metaphor, a habit too still more familiar, I am told, in Arabic poetry, there can be little doubt that the noun *ἵμνος* had its origin in the same Greek verb.‡

I take next *αμνος* 'a lamb,' the suffix of which may well be diminutival, as it must originally have been in *as-imus*, corresponding to the German *es-el*, the primitive still existing in our *ass*. Although the name of the full-grown animal has in Greek and Latin forms beginning with an *o*, *oF-is*, *ou-is*, yet an *a* appears in the double diminutive *auilla* (for *au-in-ula*), as given by Paulus (ex Festo): *Auillas*, *agnas recentis partus*; also in the

* This etymology I gave long before Dr. Wagner's edition of the *Trinummus*.'

† Compare the Latin *solus*, Welsh *holl*, E. *all*.

‡ See Aufrecht's paper in Kühn's 'Zeitschrift.'

Oscan *avnom* = *agnum*; while in Gothic we have *awi*, in Lith. *awi-s*, and in S. *avi*. Hence the vowel *a* may safely be regarded as having the better claim; and thus *amvos* is but a compression of *aF-ivos*. But this *amvos*, according to Eustathius (s. Stephani 'Thes.), had at one time an initial aspirate; and this again has its parallel in the Umbrian *hapina* (*habina*) 'a lamb,' which occurs repeatedly in the Iguvian inscriptions (see A. K.'s Umbr. Sprachd.). Further, if we may assume a variety *apvos*, this would naturally be accompanied by an Ionic *akvos*, which would stand to the Latin *agnus* precisely as *κυκνος* to its Latin representative *cygnus*. Huschke's idea that *agnus* grew out of a form *a(ui)-g(e)nus* does not seem satisfactory.

Let me close the Greek list with the somewhat doubtful cases of *λμνν*, *λμνν*, and *λειμων*, which, as some think, are derivatives from *λειβω*.

The Swedish vocabulary exhibits the same tendency to nasalize a labial under the influence of a following *n*. Thus our verbs *leave* and *rive* take the form *lemna* and *remna*, our adverb *even* becomes *jamn*, and the noun *haven*, *hamn*; and with these must be included *somna* 'to sleep,' as contrasted with *söfva* 'put to sleep,' for *somna* cannot be a loan-word from the Latin.

CHAPTER V.

DIMINUTIVAL SUFFIXES OF SUBSTANTIVES.

To take the subject of Diminutives at this early stage is no doubt to violate the logical order of enquiry; but there is a practical advantage in thus giving precedence to what has a decided bearing upon the formation of verbs, substantives, and adjectives, so that this question may well be taken out of its turn. And among diminutives I give a present preference to substantives, as the power of the diminutival suffix is in them easier of comprehension.

But diminutives are formed with various purposes, as, *a.* to denote simply smallness; *b.* tenderness or affection; *c.* pity; *d.* contempt; and of these four uses the first again requires subdivision. An object may be small in comparison with others of its own class, or it may be one of a class, all the members of which may be regarded as small by the side of other classes. In not a few cases after a derived diminutive has been placed by the side of its primitive without any marked distinction of meaning, the primitive passes out of use, so that the surviving word, for the reason that it stands by itself, seems to claim the honours of a primitive. Hence those who have to deal with language at times speak of such suffixes as in themselves meaningless. Thus Dr. Carl F. Becker, in his grammar of the German language, thinks it right to include in his list of primary substantives some which have assumed one of the terminations *er, el, en*; as *messer* 'knife,' *schenkel* 'leg,' *bissen* 'bit;' and in a note upon the passage he observes: "These terminations, *er, el, en*, differ from affixes of secondary derivation in having no influence on

the signification of words to which they are added." But this is to pass over the older forms of language. The Frisian preserved the primitive *mes* 'a knife,' while our own language has the simpler nouns *shank* and *bit*, *shank* itself in form being a diminutive from *shin*. An Englishman now says *starling*, but *stare* was once in use. The German language knows no shorter name for a certain plant than *veilchen*, nor English than *violet*, nor Latin than *viola*; but the Greek has *iov* (*Fiuv*); and it seems scarcely rash to assume that this neuter noun had once a Latin representative, *uia*, standing to *iov* much as *rosa* to *ῥόδον*; but as such an assumed *uia* was identical with another noun of very different meaning, it was but natural that it should give way to its diminutival variety.

There is nothing more characteristic of the relation which the younger languages of the world bear to the older, from whence they have descended, than the supplanting of simpler nouns by their diminutives. Thus a friend well acquainted with modern Greek assured me that I should find the vocabulary of the latter to a great extent intelligible under the hint that the terms now in use were in form diminutives without diminutival meaning; and a similar law I am told obtains between classical Arabic and its existing representatives. But we need not go far to verify this proposition. In Italian, for example, the ordinary words for 'brother' and 'sister' are *fratello* and *sorella*, with a suffix due no doubt to a feeling of affection; but even the terms *frater*, *mater*, *pater*, *θυγάτηρ*, *soror*, *uxor*, had already probably in the last two letters a similar suffix of affection, the final pair owing their variety of form to the law of vowel-assimilation. So in French, to limit oneself to two examples, *soleil*, implying a Latin *solieulus*, and *abeille* for *apicula*, have wholly superseded *sol* and *apis*.

Thus suffixes of diminution, one after another, are heaped on in the most lavish profusion, with the result that a large percentage of language is made up of them, with little perception of their original meaning. Take for example our noun *inkling*, for which we once had in use the shorter form *inkle*. An earlier form was probably *än-ick-el-ing*, the root of which is seen in the German *es ahn-et mir*, as also in the S. verb *an* 'blow;'

the metaphor being taken from scent brought by the wind, precisely as in the Latin *sub-olet mihi*. Grimm again (D. G. iii. p. 602) quotes a diminutive which I hold to be of the fourth power in *sacc-l-in-ch-in*, and (ib. p. 681) of the fifth in *es-cl-in-ch-il-in*; our own language still retaining the original monosyllabic forms *sack* and *ass*. But even this a Scotchman beats, when he speaks of “sic a bonn-ie little [= el-ick-le] wee bit lass-ick-ie.”

Yet a graver consequence at times follows, the diminutive so completely throwing off its proper power as to be available for objects, where an augmentative would be better suited. For example, the Greek *θηρ* ‘a beast’ all but passed out of use, the secondary form, *θηρ-ιον*, supplying its place; and eventually this was an ordinary term in military language for an elephant. The Greek *σπρουνθος* ‘a sparrow’ may well have had a variety *σπρουνθος*, just as *στανδιον* had an Aeolic variety *στανδιον*; and then *σπρουνθος* would have so strong a likeness to our *sparr-ow* that we may with some safety assume their identity. But *sparr-ow*, like its German equivalent *sper-ling*, has evidently a suffix of diminution; yet this did not prevent one author from applying it to the eagle, while several use it of the ostrich. The Scotch again had once, probably still have, the word *pollock* in the sense of a little crab or little fish. This must be one with *pillock*, which was used (says Jamieson) of a porpoise, a creature of somewhat huge dimensions. But here a simple explanation is found in the fact that Scotch fishermen once looked upon a porpoise as a young whale. We ourselves too, in spite of the word ‘circle’ being evidently a diminutive, have no difficulty in speaking of great-circle sailing, although the said circle extends beyond 20,000 miles.

Let us next examine the suffixes of diminution in detail, beginning with those of a guttural form, and with the Greek language. Pott (Etym. Forsch. 2, 506) has dealt with the suffix *ακ*, assigning to it this power. In my paper (Trans. Ph. Soc. 1856, p. 298) I have given a list of 67 words so formed, arranged according to their final letters; but I will take them rather in order of meanings. The sense of ‘small,’ or what is akin to it, ‘young,’ is seen in *σχιδακ* ‘a splinter;’ *ροδακ* ‘a dwarf

rose;’ λιθακ-, dim. of λιθο-; μοθακ- ‘child of a Helot;’ παλλακ- (Eust.), ‘youth or maiden;’ σκυλακ- ‘a puppy;’ βωλακ-, dim. of βωλο-; βωμακ-, dim. of βωμο-; θυννακ-, dim. of θυννο-; κλωνακ- (Hesych.), dim. of κλων-; ῥωπακ-, dim. of ῥωπ-; νεβρακ-, dim. of νεβρο-; διφρακ-, dim. of διφρο-; ψυδρακ- ‘a pimple;’ σκυθρακ- ‘a youngster;’ νοσσακ- ‘a chick;’ πορτακ- ‘a calf;’ μυακ- ‘a sea-muscle;’ δελφακ- ‘a young pig;’ ομφακ- ‘an unripe grape,’ etc. Then again the animals: σπαλ-ακ- ‘a mole’ (of which more presently), and ἕρ-ακ- ‘a shrew mouse,’ are by their size well entitled to such a suffix. Add the birds: σκολοπακ- ‘a wood cock;’ κορακ- ‘raven or crow;’ τετρακ- ‘grouse;’ the plants, θριδακ- ‘a lettuce;’ δονακ- ‘reed;’ στυρακ- the shrub ‘storax;’ and σνακ- a kind of pulse. Then we have the tools, etc.: σαλακ- ‘a miner’s sieve;’ καμακ- ‘a pole;’ σαμακ- ‘a mat;’ κλιμακ- ‘a ladder;’ λαρνακ- ‘a coffer;’ χαρακ- ‘a stake;’ and also two terms at least implying contempt, στρατυλλακ- and κολακ-. So far we have a short ᾱκ; but long vowels in θωρᾱκ- ‘breast plate,’ οῦᾱκ- ‘tiller,’ κανῶκ- ‘sea-mew;’ and again αγ, rather than ακ, as in λατᾱγ- ‘splash made by drops of wine,’ and ῥᾱγ- ‘a berry,’ which the Lat. *fragum* proves to be a decapitated word, probably for *φραγ*-, or rather *φαραγ*-, and so one with the very word *berry*. To these again may be added words where a suffix ακ has something appended to it, as, μανν-ακ-ιον ‘a little necklace,’ καφακιον and καφακης ‘chest,’ σωρακος ‘a basket,’ πιθακνη ‘a wine-jar,’ etc.

When we turn to the Latin language, we find perhaps but one example of a noun in *ax*, viz. the snail, *limax*, connected no doubt in its first part with the Lat. *limus* and our *slime*; but this deficiency will be made up before long. Meanwhile it seems to have been a peculiarity of the Latin language to favour weak vowels, as in *imb(e)ri*- compared with ομβρο-, the prefix *in* of *in-utilis* with αν of αν-οσιος, *lingua* with γλωσσα; so the Greek ἕρακ-, μυακ-, πυνδακ-, παλλακ-, are represented in Latin by *sorec*-, *murec*-, *podec*-, *paelec*-, and αυλακ- ‘a furrow’ by *aulic*-. Hence we cannot doubt the nature of the suffix in *culec*- ‘a gnat,’ *pulec*- ‘a flea,’ *cimec*- ‘a bug,’ *apēc*- ‘a point.’ So with the Greek birds in ακ, we may class *perdic*- ‘partridge,’ *fulic*- ‘coot,’ *cornic*- ‘crow,’ *coturnic*- ‘quail,’ as well as the unknown birds *turdelic*-, *spinturnic*-, *soric*-;

and with the Greek plants in *ακ*, *rum-ec-* 'sorrel,' *carec-* 'rush,' *vitec-* 'agnus castus,' *seandie-* 'chervil,' *salic-* 'willow or sallow,' *filie-* 'fern,' *larie-* 'larch,' *tamaric-* 'tamarisk;' with the Greek tools, etc., *urpec-* 'harrow,' *forfic-es* 'pinchers,' *imbrec-* 'gutter-tile,' *calic-* 'cup.' Even in *senec-ec* may well be diminutival, as it is generally the sparo man who lives to a great age, and with increasing years he gets more and more spare. At any rate the oblique cases and the Welsh *hen* 'old' tell us that *ec* is no essential part of the word. Then again, corresponding to the long *α* of *θωπάκ-*, etc., we have occasionally a long *i*, as in *radix radie-is*, or a long *e*, as *ueruex ueruēe-is* 'a wether-sheep.'

But as we found the suffix *ακ* in some Greek words with another suffix appended, so in Latin we have *carectum*, *dumectum* (or *lumectum*), *filictum*, *fructectum*, *salictum*, *uirectum*; and these united by so much of a common signification that all speak of a collection of plants or trees. *Carex* indeed, *filix*, *frutex* and *salix*, as has been just stated, already exist independently of the common suffix *um*; and again three of the seven, viz. *dumetum*, *fructetum*, *uiretum*, appear in a form which has dropped the *c* before the *t*. Hence, when we find no less than thirty-six other words in *ētum* with precisely the same sense of collected trees, we cannot but infer that they also have lost a *c*; and hence from nouns *aesculetum*, *arboretum*, *murtetum*, etc., we need not hesitate to conclude that diminutival forms, *aescul-ex*, *arbor-ex*, *murt-ex*, would have been quite intelligible. But here it may be useful to guard against an error that sometimes shows itself. It is often assumed that *salictum*, *arbustum*, *uirectum* have been contracted from forms *salicetum*, *arbosetum*, *uiricetum*, as for instance by Paulus Diaconus (ex Festo) of the ancients, and by Wagner (v. *uirecta*) in his Virgil; but here there are two difficulties. To do so is to be guilty of the anachronism of explaining old formations from those of later date; and again we have one of those never-ending etymologies which are self-convicted. If *uiretum* stand for *uirectum*, and this for *uiricetum*, then this again will be for *uiriceetum*, and this for *uiricicetum*, and so on *ad inf.* The truth seems to be that the added suffix is simply *um*, the *t* being an outgrowth from the preceding *c* in *carectum* from *carec-*,

etc., and from the preceding *s* in *arbus-um* from *arbos*. Of this suffix *um* so used I shall presently have more to say.*

In our own island the favoured suffix closely resembles that of Greece, viz. *ock*, for which Grimm quotes but two examples, *hillock* 'a small hill,' and *bullock* 'a young bull;' but we have many more, as *buttock*, *paddock*, *mattock*, *mammock*, especially in the region of plants, as *hemlock*, *charlock*, *shamrock*, *hollyhock*. On the Scotch side the list is most abundant (see Trans. for 1856, p. 223). Then for animals we find, chiefly in Jamieson, *fillock* 'a filly,' *emmock* 'an ant,' *paddock* 'a frog' (*püde*, A.-S. 'toad'), *queock* 'heifer;,' for birds, *earock* 'a pullet,' *laverock* 'lark,' *wallock* 'lapwing,' *ruddock* 'robin redbreast,' *puttock* 'kite' (Spenser); to which may be added the Cheshire *dunmock* 'hedgesparrow;,' also not a few for fish, *haddock* and others familiar to Scotch fishermen; for plants, *fintock* 'cloudberry,' *munshock* 'red bilberry,' *sourock* 'sorrel;,' the last the more interesting, as it tells us the origin of our own term, as also of the Welsh *sur-an*, corresponding, as they do, with the Somersetshire *sour-dock*, and A.-Sax. *seearp-docce*. Again instruments are found with the suffix, as *cummock* 'a crooked stick,' *crummock* 'a crook,' *gavé-ock* 'an iron crow,' *playock* 'a plaything.' To these let me add, from a paper 'On some Deficiencies in our English Dictionaries' (T. Ph. S. for 1857, p. 25), by the present Archbishop of Dublin, the word *fistock*, as occurring in Golding's 'Ovid's Metamorphoses,' 6, 9: "Scarce able to stay his fistock from the servant's face."

An almost identical suffix, *ach* or *ag*, holds its place in Gaelic, as *be-ach* 'a bee,' *bannach* or *bannag* (Scotch *bannock*) 'a cake or bun,' *ailmeag* 'a young elm,' *babag* 'a tassel,' from *bab* 'a tuft.' So too the Welsh has its diminutives in *ach* and *ig*; and Breton in *ik* and *ig*. But perhaps the richest crop is to be found in the Slavic family; as for example in Polish, where the suffix *ek* is again and again repeated upon itself. And even the oldest Slavic language, viz. that of ecclesiastic writings in Russia, has *ok*, as *kol-ok* 'a peg,' dim. of *kol* (Dobrowsky, Inst. p. 313), *ship-ok* 'a dog-rose,' *parod-ok* = *ομφακ-*. Whether the Sanskrit has a parallel form I leave Sanskritists to say.

* See p. 83.

But these guttural suffixes of diminution often suffer compression so as to lose their vowel, as Lat. *calc-* whether 'heel' or 'stone,' the word *heel* itself telling us that its Latin analogue has something external in the final *e*, while the Anglo-S. *carr*, of which *cal* is undoubtedly only a variety, and the Breton *kall* stone (*testis*) give the same evidence for *calc-* in its other use. *Arc-* (*arac-*) again is, as already stated, the very same word. *Merx* is now known (Ritschl's 'Opuscula,' p. 652) to have had alongside of it a simpler *mers* (*nertis*), so that here too the *e* is something added; and we have the exact parallel in our own nouns *work* and *ware* 'the produce of labour.' Nay, the Latin *mereo* 'I have earned by past labour,' and so 'deserve,' has no trace of the guttural. *Falx* again has in its first element what is common to *folium*, and means strictly only 'a blade;' while *lanx* has lost an initial labial, just as has the kindred term *llanos* of Spanish, and thus is akin to the Latin *planus* and Fr. *plat*. Then turning to our own language, we have *lark* from *laverock*, *park* from the A.-S. *parruk* = our *paddock*, *cark* (now obsolete) by the side of *care*, *stirk* 'a young steer,' besides others.

Again not unfrequently, while the suffix preserves its fuller form, that to which it is attached surrenders its vowel, as the Lat. *cr-ux*, *gr-ex*, and the E. *crick*, *trick*, *crag*, *flag*, *flock*, *brake*, *clock* 'a beetle' (= Sc. *golach*), etc.

I pass next to cases where the guttural itself is modified, beginning with those in which it is nasalized, and so written as *ng*. Here we have our own terms for fractions, as *farthing*, i.e. 'a little fourth,' used not merely of money, but of the division of parochial wards; * *thridding*, as used of the three portions of Yorkshire; but unhappily the *th* has been unduly transferred in the existing mode of writing *Nor-thridding*, ~~*Sou-thridding*~~ (cf. *nor-west*, *sou-west*; *Nor-folk*, *Suf-folk*), and lost after the *t* in the *West-riding*. Add *tithing* 'a little tithe or tenth' (cf. $\delta\eta\mu\omicron\varsigma$ for *East-riding*), a theoretic $\delta\epsilon\kappa\omicron\mu\omicron\varsigma$, of like geographical use, Fr. *dime* = 1.

* So in Tomlin's Law Dictionary: "*Farding deal* or *Furundel* of Land, *quadrantal terrae*, is the 4th part of an acre." Again, Palgrave (Eng. Com. 1, 115) tells us that Iceland, when first settled by Northmen, was divided into quarters called *Fierdyng*.

decimus). So we have *lording*, *shilling* (A.-S. *scill*, *scilling*), *stocking* as compared with Shakspero's *stock*, *sweeting*, *morning*, *evening*, *whiting*, *herring* (cf. Lat. *halec*), *lemming*, *gelding*. Old German has also like forms in *inc* or *ing*, as *arm-inc* 'homo pauper,' *chisil-inc* 'calculus,' *pfenn-inc* 'penny,' *snurr-inc* 'scurra' (see Grimm, D. G. iii. 350); and so occasionally *inc* is found in modern dialects; but in Pomerania the suffix *ing* is said to be still full of life, and capable of addition to any noun.

Not unfrequently the guttural gives place to a *t*, an interchange so common in childhood, where *cook* becomes *toot*; but we have also classical authority for the same in Lucian's prosecution of T at the suit of K before the Court of Vowels for malappropriation of his property. The change too is but natural, as it requires a stronger effort to bring the tip of the tongue into contact with the back of the palate than to limit its retraction to the teeth. But further, a *k*-sound is ever apt to take an excrescent *t*, and then itself to vanish ('Essays,' p. 207 f.). For the change of *c* to *t* we have historical evidence in our own language, where the old form *emmock* or *emmick* passed first to *emmet*, and then to *ant* (cf. Lat. *amita*, our *aunt*), the old *gemlick* to *gimlet*, *apricock* to *apricot*, Sc. *gabbock* to *gobbet*, *mammock* to *mammet*. And again we know from Boswell's 'Life of Johnson' that his friend *Malloch* found his name so difficult for Londoners, that he at once simplified matters by the substitution of *Mallet*. So in Latin we may safely assume a form *abiec*- as the origin of *abiet*-, on the evidence of the adj. *abiegnus*. When the grammarian Probus tells us (App. 198, 29) that we must write *aries*, not *ariex*, he implies that there existed a provincial *ariex*; and although it might be a shocking thing for an educated Roman to be guilty of so miswriting a word, to the philologer the authority of a provincial dialect ought to stand on as high a level as that of the language of the Roman forum; for after all the superiority claimed for a capital city is founded on mere accident. Nay, it is in the busy crowds of a capital that language is most readily corrupted, while conservatism prevails in rural districts. Again the same writer (197, 28) has: *miles*, non *milex*; and says the same in his Institutes (126, 36). This

It should be Σ^7 . So cancel the sentence.

seems to tell us that in a legion of 1000 soldiers the soldier was a mere unit, precisely as in Welsh, where a mass has a simple name, while an individual or grain of the mass has a name formed from it with a diminutival suffix, as *yd* 'corn,' *haidd* 'barley,' *rhyg* 'rye;' but a grain thereof, *yd-en*, *heidd-en*, *rhyg-en*. Other instructive remarks from the same writer are: *capitulum*, non *capicium* (198, 34), *poples*, non *poplex*, and *locuples*, non *locuplex* (199, 5); from whence I readily infer that *caput* grew out of some older form, such as *cop-ue*. In many cases this change of *c* to *t* has been aided by the presence of a preceding guttural, as in *gimlet*, *apricot*, *caput*, just quoted; to which we may add from our own language, *cricket*, *crotchet*, *locket*, *pocket*, *packet*, *smicket*.

But I will take another example from the Latin *anat*- 'a duck,' for this, like so many words beginning with an *a*, has lost an initial guttural. The old French has a noun *cane*, which signified alike a 'duck' and a 'boat' (cf. Diez, 'Wörterb.' p. 585); but probably the former of these meanings is entitled to priority (though Diez himself thinks otherwise), as being a natural object. From this *cane* come in the one sense *canette*, *caneton*, and the more familiar *canard*; and in the second *canot*, whence our *canoe*. Adelung in his Dictionary (v. *aente*) quotes an old Fr. *anette*, which agrees with the Italian *anit-ra* and *anat-ra*; as also with the still further decapitated *νηττα*. So too ~~νηχομαι~~ ^{νηχομαι} ~~αε~~ ^{αε} ~~νατο~~ ^{νατο} ~~νημι~~ ^{νημι} ~~αντ~~ ^{αντ} ~~νηχο~~ ^{νηχο} 'swim' may well stand for ~~καν-ημι~~ ^{νηχομαι} ~~καν-ηχο~~ ^{αε} ~~καν-ηχο~~ ^{αε}. The claim of a final *k*-sound for *anat*- as against the *t* seems confirmed by the Swed. *anka-bonda* for 'a drake;' and also by the term *alka*, whence our *auk*, a bird of the same class. Yet after all the substitution of a *t* for *c* (*k*) has often no excuse in a preceding guttural, as in many words already given, and in *sippet* (*sop*), *tippet* (*top*), *limpet*, *wew-et* ('a spider's web,' in Somersetshire).

In the next place the presence of two gutturals is obviated at times by the use of a labial. While the Romans had *culec*-, for which we, in accordance with the last series, prefer *gnat*, a Greek found relief in the form *κων-ωπ*-. The Latin *crux* again, is truer to its origin than *σκολοψ* 'a stake,' the interchange of *λ* and *r* being seen also in *σκελος*, *crus*; in *σκαλευ-ειν*, *scrutari*; in *celeber*, *creber*. So we too from *shell* have a derived *scall-op*. *Lupus*,

cut down probably from *uol-up-us*, and so one with our *wolf*, is another example, and this the more credible, as the more ancient *υκ* appears in the Gr. *λυκος*.

Κολλοψ, in like manner, 'the hump on a buffalo's neck,' seems to have superseded an older *κολλ-οξ*, in its first syllable one with the Latin *collum* and also the Latin *callum*, while we again are not offended with two gutturals in *s-crag*, although we also have the softened form *scruff*. From *furca* 'a prong' (not 'a fork,' for which two or more prongs are necessary, so that the Romans in early times called for a plural to denote a fork) should have proceeded a plural *forc-ic-es* for 'pinchers,' but here it was preferred to say *forcipes*, *forpices*, or *forfices*, words all of one origin, although some seem to have thought that they rightly explained the words by referring them to the adv. *foris* and the several verbs *capio*, *pecto*, and *facio*. *Apex* for *acex* has been already noted, and also *σπαλαξ* for *σκαλαξ* from *σκαλλω*.

But the most violent change in our suffix is the passage of the final guttural to a final *m*; yet, strange as it may appear, it seems to be beyond doubt. In our own language we have *bottom*, as a variety of *buttock*; while the old German has *podam*; so to our *brake* corresponds an old German *varam*. Our *flock* (of wool, &c.) has not only varieties *fluff* and *flue* in English, but, what corresponds to these, *pluma* in Latin.

But besides *p* and *t* in place of the final guttural, instances occur of *r*, *b*, and *d*, as *trab-* 'a tree,' in S. *daru-*, pl. nom. *darav-as*, and so one with *δορυ*. The Greek names for numbers, as *μυρ-αδ-*, *δυσ-αδ-*, *τριαδ-*, &c. we may safely assume to be of diminutival form on the sole evidence of the Latin *unio*, *duplio*, *trio*, etc., the Ital. *duetto*, E. *duct*, etc.; and if so, we seem to have a *d* as a substitute for *g*, corresponding to *t* in place of *k*. See also *dulcedo*, *multitudo* below in the chapter on Adjectives.

But the guttural not merely gives place to other consonants. It often vanishes, and this is no matter for wonder, as in Greek for example no word is allowed so to end, for *εκ* and *ουκ* are not in themselves words but always attached as proclitics to that which follows. Hence *γυνα-ικ-* retains its *κ* only in oblique forms, dropping it altogether in the voc. *γυναι* and nom. *γυνη*,

while in Sanskrit feminine words formed with a similar suffix also drop the *k*-sound, as *yûnî*, *dâ'tr-î*, *janitrî*, compared with the Latin *iunic-*, (*datric-*), *genetric-*—See Bopp, V. G. 1, 269, who however holds the Sanskrit to be the genuine form, to which Latin has added an inorganic *c*; but this is an assumption founded on another assumption, that Sanskrit forms are always the older. Our own language too has a similar propensity, the verbs *slay*, *may*, our adjj. *holy*, *any*, our sbb. *day*, *way*, *honey*, having all lost the guttural, which in German has survived. It is thus that the Scotch, besides the forms *haddock* and *haddick* for the fish, have also the varieties *haddow* and *haddie*; and indeed these two terminations are far more familiar to us of the south; those in *ie*, as *birdie*, still carrying with them a feeling of their Scotch origin, while those in *ow* belong to our own idiom; and indeed a comparison of such forms with the German again brings into view the original guttural, as in the cases of *sorrow*, *morrow*, *marrow*, *furrow*, *bellows*, *tallow*, *gallows*. So too our *window* stands by the side of the Scotch *winnock*. The Gaelic has traces of the same loss, seeing that the terms *dula* 'noose,' *cadha* 'narrow pass,' *bara* 'barrow,' betray the lost guttural in the plurals *dulach-an*, *cadhach-an*, *barach-an*. So again the old Slavic exhibits, what I venture to write in the Greek character as more intelligible for an English reader, *οπιεχ* 'nut,' *πραχ* 'dust,' *σπραχ* 'fright,' *γραχ* 'French-bean;' *μιεχ* 'leathern-bag,' *γριεχ* 'sin;' *κοζυχ* 'skin,' *ρεπυχ* 'a plant,' *δυχ* 'spirit,' which in modern Servian (Wuk's Servian Gr. transl. by Grimm, pp. 24, 25) appear as *ορα*, *πρα*, *σπρα*, *γρα*; *μυιε*, *γρηιε*; *κοζυ*, *ρεπυ*, *δυ*. Similarly the Lat. *pulec-* has practically lost its guttural in Germ. *floh*, and even for the eye in E. *flea*; and the L. interj. *ah* had already in the Augustan age taken the softer form *a*.

This premised, I ask whether the five vowel-declensions of the Latin vocabulary may not have originated in a similar loss, so that *rosac-*, *ap(e)roc-*, *nauc-*, *retic-*, *metuc-*, *rec-*, *trabec-*, were at one time more genuine representatives of the crude-form than what are now put forward as such, viz. *rosa*, etc. It is true that they had no longer in classical times a diminutival power, but this is a difficulty already disposed of. In the first place then *ῥοδ-ακ-*

and *τραφ-ηκ-* in the fuller form occur in the Greek vocabulary; so also the simpler *nau-* in *vavs* and *naufragus*, and the simpler *trab-* in *L. trabs*. But we have a larger supply of witnesses in derivative adjectives. As *lapid-eus*, *ciner-eus*, *stramin-eus* are formed directly from *lapid-*, *cinis-* (*cineris*), *stramen-* by the addition of a common suffix, we seem to be entitled to a similar course of derivation in the case of the 24 adjectives (see *Trans. Ph. Soc.* for 1856, p. 300) which correspond exactly with *rosac-eus* from *rosa*, as *fabaceus*, *violaceus*, etc. Again as a suffix *-on* is established for Latin by the instances *turb-on-*, *asperg-on-*, *harpag-on-*, and *scaturig-on-* by the side of *scaturex -igis*, we are bound to observe a similar division in *ferulag-on-* 'a sort of fennel,' *lappag-on-* 'a plant of the burr kind,' as also the botanical terms *cuuilag-on-*, *similag-on-* with *serrag-on-* 'saw-dust;' but this points to crude forms *ferulag-*, *lappag-*, *cuuilag-*, *similag-*, *serrag-*, as those which eventually gave place to *ferula*, *lappa*, *serra*, etc. And thus we come across a suffix, which is the legitimate analogue of *ock* of our own language, so familiar in the same sphere of botany, as *shamrock*, *charlock*, etc. The list of Latin words formed as *ferulagon-* amounts to just twenty, as seen *ibid.* p. 301.

In the *o*-declension the adj. *aprug-nus*, aft. *aprunus*, speaks in favour of an older *aperoc-*, rather than *apero-*; and the strange form *uesperug* or *uesprug*, which Quintilian (1, 7, 12) mentions as found in an inscription of some kind, admits of a simpler interpretation than his own that it stood for *uesperuginem*. But here again the derived adjectives in *eus* appear as witnesses in favour of archaic forms in *ac*, as first from nouns in *us*, *bullac-eus*, *intubac-eus*, *tofac-eus*, *capillac-eus*, *surculac-eus*, *papyrac-eus*, *murtac-eus*; and then from neuter nouns, *sebac-eus*, *hordeac-eus*, *liliac-eus*, *miliac-eus*, *foliac-eus*, *lioliac-eus*, *miniac-eus*, *porrac-eus*, *argentac-eus*, *frumentac-eus*. Even the adjj. *bellicus*, *publicus*, *colonicus*, *Punicus*, *Gallicus* seem fairly to admit of a similar origin, the *c* forming no part of the suffix; and I say this, not forgetting the numerous Greek adjj. in *ικος* as *πολιτικ-ος*, for these also may be included in the theory.

In the *i*, *u*, and *e*-declensions my reliance is chiefly on dimi-

natives formed from the nouns in question. In *cornic-ula* so written no one will object to the position of the hyphen, seeing that we have the word *cornic-*. I claim the same then for *nauc-ula*, *canic-ula*, *partic-ula*; *anguic-ulus*, *funic-ulus*, *fascic-ulus*; *retic-ulum*. *Geniculum* and *acicula* alone are given in our lexicons; but these must have been preceded by earlier forms *genuculum* and *acuc-ula*, as proved by their analogues E. *knuckle* and Port. *agulha*; and further that *genu* once had a final guttural is established by the forms of the vb. *nitor* 'to kneel,' part. *nixus*, for the older form of *nitor* must have been *gnictor*. The Germ. adv. *knicks* goes far to prove the same. An adjective *mētīcūlōsus* finds a place in some dictionaries, but this is an error for *mētūcūlōsus*, which speaks in behalf of *metuc-*, just as does *sītīcūlōsus* in behalf of a form *sitic-*. In the fifth declension the present theory explains the forms *rec-ula*, *diac-ula*,* *spec-ula*. Then as to the nouns which oscillate between the *i* and *e*-declensions, we find *uolpec-ula*, backed by the Greek αλωπεκ-, *trabec-ula* backed by τραφηκ-, and the Latin language by the side of *strues* had a noun *stru-ic-* (n. *struix* and n. pl. *struices*).

It may be objected to what has been said, that while βωλακ-, θυννακ-, νεβρακ-, διφρακ- are said to be dim. of βωλο-, θυννο-, νεβρο-, διφρο-, the theory makes the latter to have grown out of βωλοκ-, θυννοκ-, so that the latter series consists of diminutives just as the former does. No doubt the words are duplicates of each other, mere dialectic varieties; yet as the fuller form is preserved in βωλακ-, etc., for that very reason the senso of the diminutival power is more deeply impressed on them.

I have said nothing of the Greek declensions, though convinced that similar reasoning would lead to the same conclusion; but I leave this enquiry to others, only adding two little arguments of my own. The Gr. noun ν-ίος is represented at times in modern Greek poetry by a secondary νίοκας, as I am informed by Dr. W. Wagner, who gave me as an example: Τί κάμεταν τὸν νίοκας μὸν τὸν καπετὰν Ἀνδρίκο; 'What have you done with my dear son, the Captain Andriko?' (Passow, Carm. pop. Gr. rec. xlvii.). Secondly I would ask whether the Attic declension in ως, as λεως

* Cf. too G. *bay*, E. *day*.

(= *λαος*), may not owe its long vowel to a compensation for a lost guttural. This view seems to receive some support from *αλωπηξ* as the nom. of *αλωπεκ*-, for here also I suspect a pronunciation *αλωπης*, the *κ* of *αλωπηξ* being silent, just as *crux* passed in Spanish to *cruz*. Thus *sex-centi* readily slipped into *sescenti*, *ec-scendo* into *escendo*. The same friend in his edition of Terence explains on my theory the occasionally long quantity of *us* in the second declension, as in Ter. Ad. 4, 2, 49: "*Aeschin|ūs od|ióse cessat; prándium corrúmpitur*"—where I hope it may be unnecessary to guard scholars from treating *|us odi|* as a tribrach.

The theory then here maintained is that all the vowel-declensions consisted of nouns with a diminutival suffix, which had altogether abdicated its original power, so that to denote real diminution an additional suffix was required, and even two additional suffixes often preferred. Here we have a solution of the somewhat strange problem, that Latin, so unlike our own and many other languages, was almost without monosyllabic forms for substantives. Even *nux*, *nox*, *lux*, *nix*, *mos*, *uis*, etc. will be found on closer examination to have been cut down from fuller forms of more than one syllable.

But there are other suffixes of diminution besides those which ended in a guttural, or its substitutes, viz. those which I would class together, *el*, *er*, and *en*; and I so class them together the more, because I find them very apt to interchange. I take *el* first, as probably the most primitive, seeing that besides its very frequent use as a suffix, it seems to constitute the root-syllable of *ελ-αχvs*, and, as I believe, of our own *little* for *el-ick-el*. The power of the suffix is well seen in the Germ. *stach-el* 'a sting,' in *fer-k-el* 'a young pig;' and probably in the fractional terms *drittel*, *viertel* . . . *achtel*, *neuntel*, for this seems more likely than that we have here a corruption of *theil*, especially when we keep in view our own term *fer-kin* 'the fourth of a barrel,' as well as *farth-ing*. But it is in Southern Germany, especially Austria, that the best evidence is found, as it is still a living suffix which may be added at pleasure to any noun, as *mann-el*, *weib-el*, *hund el*, or in shorter form *mannl*, *weibl*,

etc. So too it is a familiar ending in our own language, still carrying with it the notion of little, sometimes with a still surviving primitive, oftener not, as *nozz-le*, *nav-el*; add the living creatures *beetle*, *snail* (*snagge* in Sussex, says Ray), *throstle* (*thrush*), *weas-el* (*vare*, a species of weasel in Somerset); *weev-il*, *wenn-el*, prov. 'a weaned calf.' Then we have the plants *darnel*, *fennel*, *sorrel*, *thistle*, *nettle*, *bramble*; the instruments *needle*, *shovel*, *thimble*.

In Latin the preferred form is *ul*, as in *oc-ul-us*, *loculus*, *angulus*, etc.; but here the earlier *el* reappears in the secondary diminutives *ocellus*, *locellus*, *angellus*, etc. In Greek there often co-exist forms in $\epsilon\lambda$ and $\alpha\lambda$, as $\acute{\iota}\epsilon\lambda\omicron\varsigma$ or $\acute{\iota}\alpha\lambda\omicron\varsigma$; $\omicron\beta\epsilon\lambda\omicron\varsigma$, $\omicron\mu\phi\alpha\lambda\omicron\varsigma$, etc. Add $\omicron\beta\omicron\lambda\omicron\varsigma$. The form *al* occurs in not a few English abstract nouns, first of Saxon words, and then, by imitation, of words deduced from Latin or Norman-French, as *betrothal*, *up-heaval*, with *removal*, *reversal*, *revival*. But here we should be on our guard. The word *bridal* must be separated from these, first as not formed from a verb, but more distinctly so, as standing for *bride-ale* (A.-S. *bryd-eale*), 'the marriage feast,' then 'the marriage itself.' Thus Rushworth, 'Coilection,' &c. p. 191: "Complaints concerning Ales and Revels upon the Lord's Day . . . inconveniences daily arising by means of Revels, that such Revels, Church-Ales, Clerk-Ales, and all other Publick Ales be henceforth wholly suppressed." Mr. Wedgwood in his Dictionary (v. *Bride*—*Bridal*) confirms this by parallel forms from O. Swed.: *fastningar-öl* 'feast of espousals,' *graf-öl* 'of burial,' etc.

Er. Grimm (D. G. ii. 122) gives a list of words with a suffix *er*, but without assigning any special power to it; but I think his own examples fit in with the notion of smallness. I give then as instances, including others from our own language, first small animals—G. *mard-er* 'a marten,' E. *adder*, *badger*, *otter*, *bearer*, *fresher* 'a young frog' (Suffolk); plants—G. *dodder*, E. *clover*, *heather*; instruments—G. *becher*, *hammer*, *messer* (old Fris. *mes* 'a knife'), E. *fetter*, *garter*; and gen. G. *eiter*, *fehler*, *kaffler*, *lager*, E. *bladder* (G. *blase*), *fritter* 'a small pancake' (*froiz* 'a pancake,' Suffolk), *splinter*. In Greek and Latin $\pi\alpha\tau\epsilon\rho$, $\theta\upsilon\gamma\alpha\tau\epsilon\rho$

frater, etc. have already been noticed as containing a dim. suffix of affection. Then again in Latin we have the living creatures *aper*, *caper*, *passer*, the botanical terms *acer*, *cicer*, *papauer*; the neuter nouns *iter*, *cadaver*, *uber*, *tuber*; add to which *puer*, *puera*, *liber*, *numerus*, *humerus*, *vesperus*.

The other neuters, such as *iecur*, ἥπαρ, like our *liver*, etc., must go with the above; and I am strongly inclined to include the neuters in *s*, whether Greek or Latin, as *scelus*, τεμενος; although I am not blind to the difficulty that if the theory be right which considers *er* as growing out of *el*, it will follow that the *es* of *sceles*-, τεμενec- grew out of the earlier *er*; whereas it is with some reason held that the final *s* of *scelus* preceded the *r* of *sceler-is*. It is possible perhaps that this sibilant suffix may have superseded some guttural form.

Examples in *en* are G. *fohl-en* 'foal,' *fink-en* 'finch,' *biss-en* 'bit,' *bog-en* 'bow,' *bolz-en* 'bolt, arrow,' *deg-en*, 'sword' (our *dagger* from *dig*; cf. *pug-ion-* from *pungo*), *klob-en* 'clue,' *mag-en* 'maw,' *ster-n* 'star,' *zeich-en* 'token.' Add E. *maiden* with *maid*, *batten* with *bat*, *bur-n* with *br-ook*, *weapon* = G. *waffen*. Then in Latin we have *as-inus*, *ag-nus* with ἀμ-νος, *acinus* 'a single berry of a grape bunch,' *geminus*, *terminus*, *somnus*.

In support of the convertibility of *el*, *er*, *en*, we have first for *el* with *er*, G. *stöpfel*, *fessel*, *lummel*, *kuttel* by the side of our *stopper*, *fetter*, *lubber*, *chitterlings*; and conversely G. *masern*, E. *measles*. This too is confirmed by the reappearance of the original *l* in *umbella*, *puella*, *stella*, *agellus*, *libellus*, *labellum*, *lucellum*, from the simpler *umbra*, *puera*, a lost *stera* (= E. *star*), *ager*, *liber*, *labrum*, *lucrum*. We see the change also in the Fr. *épître* and *apôtre* from the Latin, or rather Greek; and in *titre* from *titulus*.

For *el* with *en*, G. *esel*, L. *asinus*, G. *kümmel*, κυμινον. Also *asellus*, *pagella*, *columella*, *scabellum*, *sigillum*, from *asinus*, *pagina*, *columna*, *scamnum*, *signum*.

For *er* with *en*, G. *koffer*, E. *coffin*; G. *marder*, E. *marten*; and G. *degen*, E. *dagger*. So the Fr. *pampre* from *pampinus*, *ordre* from *ordine*.

Attention has already been drawn to the habit of heaping on

diminutival suffixes unsparingly, and this in the course of time has led writers on language to treat as single suffixes what in reality are twofold; and indeed by neglecting the initial vowel of the first suffix to reduce what was really disyllabic to a single syllable. No doubt it is quite true that in practice these double suffixes are treated as one, and in fact added *per saltum*, to borrow a University term, so that we are not even at liberty to attach them separately. Examples of this kind are *lock* for *el+ock*, *ling* for *el+ing*, *let* for *el+et*, O. G. *lein* for *el+ein* or *el-in*, *rel* for *er+el*, G. *chen*, E. *kin* for *ich-en* and *ick-in*, L. *gon* (*don*) for *ag+on*, etc., *men* for *um+en*, Gr. *ματ* for *ομ-ατ*; and not unlike the same is the Lat. suffix *ion* for *ig-on*.

Of the form *lock* Jamieson gives two examples, *hump-lock* 'a small heap,' and *knub-lock* 'a small knob.' We may probably add the plants *hem'lock*, *char'lock*, and *rullocks* from the verb *row*. Not unfrequently etymologists seem to have been led away from the real origin of the suffix to find in the syllable our noun *lock*, or the A.-Saxon *lac* 'a gift' or 'play.' Mr. Danby Fry in his two papers read before the Philological Society (Jan. 9, 1861; and vol. for 1862-3, p. 33) justly rejects these theories, holding the suffix to mark abstract nouns, just as does our familiar *-ing*. I now add my own belief, that we have here a double suffix of diminution. In the second of these papers he gives what is probably all but a complete collection, first A.-Sax. *aglac* 'torment?', *feoht lac** 'fighting,' *lib-lack* 'a philtre,' *reaf-lac** 'robbery,' *scin-lac* 'apparition,' *wed-lac* 'wedlock,' or rather 'desponsio,' *wif-lac* 'matrimony,' *wite-lac* 'expiation'(?); then from old English, besides those which are known to have already existed in A.-Sax. though with slightly altered form marked *, *fear-lac* 'fear,' *freo-lac* (*freelage*, Jamieson) 'freedom,' *schend-lac* 'disgrace' (A.-S. *schend-an* 'to shame'), *woh-lac* or *wouleche* 'wooing,' *knouleche*. In the last pair we find the guttural passing into the quasi-sibilant, as in *church* for *kirk*. Other gentlemen in the same paper supply additional examples: *brud-lac* 'bridal, marriage,' *feyrelac* 'beauty' (A.-S. *fæger* 'fair'), *hendelaic* 'politeness,' from *hende* 'polite.' Mr. Fry further gives us (p. 41) the Norse *ör-leik-r* 'liberality,' from *ör* 'liberal' and

Swed. *kär-lek* 'love' from *kär* 'dear;' and from the Ancien Riwe *god-leic* 'goodness,' *urev-leic* 'nobleness of mind.' But already Grimm in his list 'Diminution substantivische,' p. 675, note, quotes the old forms, *bub-lach* 'little baby,' *messer-lach* 'little knife,' with *tischlach*, *kerzlach*, *keplach*; and to the same category belong no doubt the forms given in p. 674: *frau-eli*, *äug-eli*, and *äug-li*, *gans-le*, *bret-le*, etc., which must be corrupted from *frau-elic* (or *-elich*), etc. Indeed *bret-lich* he says actually occurs, and the plurals of *gänsle*, *bretle*, etc. again recover the guttural, as *gänslich*, *bretlich*, etc. Finally it may be noted that of all such forms our own language has preserved only *wedlock* in the secondary sense of 'matrimony,' and *knowledge*, the latter slightly modified.

Of the forms in *let*, it may be enough to quote *martlet*, *pikelet*, *eyelet*, *hamlet*, and to add that *islet* is probably a blunder for *ey-let*, just as *island* is for *ey-land*.

Then for *ling*, besides those given in the Phil. Trans. for 1856, p. 244, as *bantling*, *changeling*, *darling*, *gosling*, etc., I may give some additional forms supplied by Dr. Trench in the volume for 1857 ('Deficiencies in Eng. Dict.,' p. 25): *wormling*, *loveling*, *dicarfling*, *streamling*, *chasteling* (= 'a eunuch'), *timeling*, *setling* (a cutting to plant), *niceling*, in themselves an interesting set of words, and still more interesting when the passages from which they are quoted are seen.

The German suffix *lein*, so common for diminutives, has in old German fuller by-forms in *el-in* and *el-în*, as *sun-elin*, *funk-elin*, and with umlaut, from *gans* *gens-elin*, from *wort* *wört-elin* (D. G. 3, 670). The Swiss dialect still abounds in this suffix *el-in* (Frauenfeld's 'Schweizerische Mundart,' 1838, p. 49). But it seems somewhat strange to find the French employing the same in *orph-elin*, from a Lat. *orphaninus*.

Er+el is seen in E. *pickerel*, *cockerel*, *mackerel*.

The Germ. *chen* (older *kin*), E. *kin* retained and still retains its preceding vowel in several examples, as in older Germ. *mand-ekin* = E. *mann-ikin*; *son-ekin* or *sön-ichen*, *vriend ekin*, *hond-ekin* (D. G. 3, 678 ff.); and in Platt-Deutsch, *kinn eken*, *katt-eken*. So too a vowel is preserved in what is the same double suffix,

that of the Lat. *uert-igon-*, etc.; also in *ferul-agon-*, *serr-agon-*, etc., and in the Gael. *cur-achan* 'a coracle,' *eun-achan* 'a little bird,' *be-achan* 'a little bee;' and from a verb *leum* 'leap' *leum-ach-an* 'a frog,' or with the suffixes transposed *leum-'n-ach*; etc. (Ph. Tr. 1856, p. 240). In the same paper (p. 241 ff.) are to be seen some sixty examples from our own language, many now obsolete, as *cat-kin*, *ger-kin* (*gourd*), *fer-kin*.

It is a common practice to speak of *men* and *ματ* as Latin and Greek suffixes of neuter nouns; but a more correct view, as it seems to me, is to regard *um-en* and *ομ-ατ* as more genuine forms, as in *teg-umen*, *doc-umen*, *col-umen*. So the Greek *ον-οματ-* (*ον-υματ-*) as standing for *γον-οματ-* by the side of *γυ-γ(ο)ν-ωσκ-ω* has the suffix in its entirety; and so also *στοματ-*, which seems to have been cut down from *οστ-οματ-*, and thus is in root one with the Lat. *os*, *oris*, the *τ* being excrecent, precisely as in Lat. *ost-ium* (cf. too in this respect *οστρεον* with *os*, *ossis*).

Gon and *don* are often put forth as Latin suffixes of substantives, but here again I claim a preceding vowel, as *uor-ag-on-*, *im-ag-on-*, *or-ig-on-*, *acr-ug-on*; *dulc-ed-on*, *pingu-ed-on-*, *multit-ud-on-* (for *multoc-ud-on-?*). But these last forms will be best treated when we come to the adjectives.

The Lat. suffix *ion* calls for more consideration. That it has a diminutival power is seen beyond all mistake in *matellio* the dim. of *matula*, in *sennccio*, whether translated 'a little old man' or 'groundsel,' for here the name points to the grey fibres of the flower in its last stage. *Homunc-io*, *pus-io*, and *pumil-io* are more marked examples; but the same idea also accords well with words which denote insects or worms, as *bibio* 'a kind of fly' (Afran.), *papilio*, 'a moth,' *cureulio* 'weevil,' *mulio* 'a gnat' (Plin.); or birds, etc., *pipio*, *asio* 'a kind of owl' (Plin.), *uespertilio* 'bat;' or fish, *gobio*, *rubellio*, *fario* (Auson.); or instruments, etc., *pugio*, *scipio*, *titio*; and with the contemptuous terms for men, as *toculio*, *wulpio*, *trebriio*, *litterio*. Lastly, in the series *unio*, *duplio*, *trio*, *quatrio*, *quinio*, *senio*, the suffix is not out of place, if the units which enter into them are regarded as small, which on the face of a die is of course the case. The paper in the Trans. for 1859, pp. 274-6, gives a list of some eighty examples,

which are all of the masculine gender. But I also claim the same diminutival power as originally residing in the abstract verbals of the feminine gender, and their number just exceeds 2000. Here however I shall perhaps be told that the Latin suffix *ion* of feminines is of equal power with our own *ing*, as used in similar verbals, *dancing*, *writing*, or as the *en* of German, *ein* of Greek, *ere* of Latin infinitives, employed with the idea of an abstract or general term. This is no doubt true, but is still unsatisfactory, and this for several reasons. In the first place, as the stem of the verb already denotes the very same thing, the action in its most abstract form without any of the accidents of person and time, the addition of an abstract suffix was wholly superfluous. Secondly, it is difficult to see how such an abstract suffix can have obtained a fitting representative, seeing that it is altogether a negative idea. Again abstracts and generalities are precisely what early language does not intend to deal in. They belong to the highest stages of knowledge, not to that early condition, when the material wants of man's nature claim his exclusive attention, so as to confine his thoughts to particulars alone. A metaphysician may amuse himself with definitions of time in all its vagueness, and with problems about eternity. By the untutored savage time is considered only in its subdivisions; and thus the very word subsequently employed for the general idea, viz. *tempus*, when examined, is found to denote simply a material limit. Thus *aratio* may well have meant not all the ploughing that ever was or is or will be, much less all the ploughing that any imaginative mind may conceive; but, more intelligibly, a bit of ploughing. Nay, the very suffix *ing*, so used in our own language for abstract nouns, tells the very same story; for this also, as we have seen, was originally a familiar suffix of diminution, as in *farthing*, *lording*. So the diminutival suffix *el* serves as an abstract in the Ger. *hand-el*, *tad-el*, *ad-el*; and many similar examples will be found in Grimm (D. G. ii. p. 100). The suffix of such abstract nouns as *dictu-*, *captu-*, is *u* rather than *tu*, for the *t* is an outgrowth from the preceding *c* or *p* (cf. 'Essays,' pp. 229 and 237); and thus here also we have united the ideas of diminution and abstraction.

See also what was said above of *al* in *upheaval*, etc. The German infinitives in *en*, as *schreiben*, the Welsh in *eg*, as *rhed-eg* 'to run,' have again suffixes identical with those of diminution; and yet they are truly abstract nouns.

I have said that the bare stem of a verb is well fitted to denote the abstract idea; but let me add that Legonidec, in giving the varieties of form employed in Breton as infinitives, after enumerating those in *a* or *an*, 2 in *i*, 3 in *el*, 4 in *out*, adds, "Il est encore des verbes dont l'infinitif est absolument semblable à l'impératif." But he is shocked at such an anomaly, and goes on to say, "Je remarquerai que c'est un abus; mais comme il est consacré par l'usage, j'ai cru devoir donner ici une liste des verbes qui sont sujets à cette défectuosité." He would probably have taken less offence at this, had he known that in English *love* and *fear*, etc., are at once verbs and abstract nouns. See too the following sections.

Es + *el*, or *is* + *al* (D. G. ii. 105), as, Goth., *gruoz-s-al* 'greeting,' old G. *wēh-s-al*, aft. *wech-s-el* 'change,' akin to Lat. *vic-em*. So in old Norse, *ken-'s'l* 'notio,' *herm-'s'l* 'luctus,' *meid-'s'l* 'laesio,' G. *rāth-'s-el* 'riddle,' *drang-'s-al* 'oppression,' *mūh-'s-al* 'difficulty,' *schick-'s-al* 'fate,' *über-bleib-'s-el* 'remainder,' *an häng-'s-el* 'appendix,' etc.

El + *es* (D. G. ii. 334), A.-S. *fūt-els* 'vasculum,' *fet-els* 'baltens,' *hyd-els* 'latibulum,' *ræd-els* 'riddle,' *sticc-els* 'sting' (cf. G. *stach-el*), etc.; Norse, *stif-elsi* 'obstinatio,' *fang-elsi* 'carcer,' Swed., *märk-else* 'signum,' *giut-else* 'effusio,' *var-else* 'mansio,' Dan., *bind-else* 'impedimentum,' *domm-else* 'iudicium,' *hör-else* 'auditus,' etc.

Ium, the Latin suffix, is possibly a double form for *ic-um*, viz. in *gaudium*, *odium*, *imperium*, and at any rate seems diminutival in power. Cf. *Glycer-ium*, *Dorc-ium*, etc., and the Greek *iov*, as in *παίδ-iov*.

Iov, in Greek *παίδ-iov*, etc., must go with the preceding.

Our own suffix *ness*, so familiar as attached to adjectives, may have grown out of *en* + *es*. But this question I leave to the consideration of those who apply themselves especially to the English language.

It was contended above (p. 68) that *um*, in *arboretum*, *arbus-*

tum, *salictum*, though in itself originally of diminutival power, was employed as a collective. The latter idea is closely connected with that of abstraction, which embraces all the particular cases. A tailor, for example, produces a piece of cloth, some three inches by two, as a sample; and this in some respects answers the purpose better than a complete coat made of the same material, for the thought is now concentrated on the texture; and the quality, without reference to the quantity, without reference to the form or fashion of the coat, etc., is brought under the eye. In fact, it serves as a specimen of any amount of cloth. It is in this way, as above stated, that the diminutival forms, *shirting*, *sheeting*, etc., came into use as terms of a collective character. So the numerical words, *duplio*, *trio*, *ternio*, *quatrio*, *quaternio*, etc., in form again diminutives, in use denoted packets of two, three, four, etc. The same holds of the Greek *δυσάδ-* *τριάδ-* etc.; and I may now add that the collective sense appears in such words as *exercitus*, *iuventus*, *ciuitas*, *consilium*, *legio*, *multitudo*, although an earlier use of them was as abstract nouns; and the majority of them, perhaps all, have suffixes in origin diminutival. So *ia* in *gratia* constitutes an abstract, but in *familia* and *Gallia* a collective, ‘the whole body of slaves, of Galli.’ The German *-thum*, E. *-dom*, in the same way unite the two ideas, as *Heiden-thum*, ‘heathenism or heathens;’ *Christen-dom*, but *wis-dom*.

In *doc-um-ent-um*, *teg-um-ent-um*, we have three suffixes of diminution, the *t* again an outgrowth from the *n*.

CHAPTER VI.

GRAMMATICAL FIGURES.

THOSE changes which grow out of the assimilation of vowels and consonants, are of but limited extent, and so tend to disguise the origin of compound words far less than what we have next to consider, the so-called figures of grammar. In dealing with these a first duty is to warn the student against the prevalent habit of regarding the Greek words employed upon this service as philosophical explanations, and so closing the path of enquiry. They are in fact but mere labels to mark a collection of similar facts; and to this extent perform an ignoble perhaps, but still useful office. But even this honour must be refused to not a few of them; for at the very outset we must separate them into two distinct classes, carefully distinguishing those which speak of the lengthening of words and those of the opposite character. The one law which governs the changes in form of words is that general law which characterises the action of man on every side, the desire to abbreviate labour; and hence we may safely refuse to admit the claims of those figures which pretend to extend words in form without any addition to the idea conveyed; whether such extension be claimed for the commencement, the middle, or the close of a word, or, to use the convenient terms of German philology, the *an-laut*, the *in-laut*, or the *aus-laut*. The fact is that those grammatical figures which speak of extension are for the most part founded upon an inversion of the real facts, or in other words a disregard of chronology.

Under this category of grammatical figures which we are

thus called upon to cancel, as being utterly without a title, there fall in the first place, those which bear the names, Prosthesis, Epenthesis, and Paragoge, or to use the language of Bopp, *Vorschlag*, *Einschiebung*, and *Zusatz*.

I take these terms in order, and so commence with Prosthesis. This figure is commonly called in aid when the assumption is made that some short vowel is prefixed to a word for euphony, by which is probably meant facility rather than beauty of speech; and within very narrow limits there is some sense in the use of the word. Thus when a foreign word which begins with two consonants is presented to the ears of a race not accustomed to the combination, there is undoubtedly a tendency to prefix a short vowel. A clear example of this has occurred in the labours of the missionary, who has found himself compelled to make a polysyllabic word of what with us is a monosyllable, in the form *Echrisito* or even *Ekarisito*. Similarly an Englishman of the name of Stallybrass, if residing say in Hungary, finds that name transformed to *Estallybrass*. Hence, when the Keltic races of Gallia were brought at last to accept a Latin dialect in lieu of their earlier language, they might be excused, if they modified words which began with two or more consonants by prefixing the sound of a weak *e*, as in *escrive*, *escu* for *scribere*, *scutum*, and so on. Yet even here other explanations at times offer themselves. But within the limits of the classical languages, and generally in native languages, it will commonly be found that where two forms present themselves, one with and one without an initial vowel, the longer form is the more genuine.

It is especially in the teaching of the school of Sanskritists that what I deem to be the erroneous habit of treating initial vowels as inorganic prevails; but their teaching has been to a great extent accepted in our leading Greek lexicon. It is therefore from these sources that I shall take my instances.

Avnp as opposed to the *S. nara* is a favourite example. But it so happens that this is the very word put forward by Dionysius as one that has lost a digamma. Now an initial digamma habitually interchanges with an *m*; and accordingly in the Greek

language itself we find *Ἀναξι-μανδρος* by the side of *Ἀλεξ-ανδρος*. Then again *ποιμην* and *ποιμαινω*, having an equivalent for *πων* 'sheep' in the first syllable, seem to have *μαν* for the second, to say nothing of *ποι-μαν-ωρ*, as compared with *στυγ-αν-ωρ* and for final suffix with *ευ-πατωρ*. Our own *man* exhibits the very same interchange with a *w* in the Mid. Germ. *wan* for *man* (Grimm, D. G. iii. 8); and we ourselves even now have the same sound, though not written, in our *one says* (= *man sagt*); and in *no one*=G. *nie-mand* and L. *ne-mon-*, for these English phrases have nothing to do with the numeral *one*. Yet even this numeral is an example of the same interchange, as it is the analogue of the Gk. *μεν* (the particle) and the root of *μον-ος*, as also of the archaic L. *oenus* for *unus*, so that *έν* of *είς* is to be regarded as a corruption of *φεν* and so of *μεν*. Nay the Latin *hom-on-*, when placed by the side of the Italian *uom-o*, raises a strong probability that it is the analogue of *φav-ερ-*, for the substitution of *o* for a Greek *α*, as in the Aeolic dialect, and again the substitution of *m* for a Greek *ν*, are just what was to be expected. It is in this view that I regard the *mon* of *ne-mon* as representing the first three rather than the last three letters of *hom-on*.

Ἀστηρ *astrum*, as opposed to E. *star*, G. *stern*, Skr. *tara*. Now the Skr. vb. *as* 'shine' gives us a reasonable starting-point, and this verb seems to be one with *αθ* of *αιθω* 'burn.' Secondly, the *t* after an *s* may well be excrecent, so that *αστ-ερ-* might signify 'the little shiner.' The Skr. *tara* then is specially corrupt, although not more so than *ter* in the L. *septem-t(e)r-iones* 'the seven little stars' of the Great Bear. Hence the F. *étoile* (for *estoile*) was entitled to an initial vowel.

Ἀρ-ασσω, as opposed to *ῥασσω*, *ῥαβδος* and our *rod*, by its very suffix *ασσω* tells us that the root-syllable must be *αρ* or *ῥρ*, perhaps with some lost initial consonant; and the Latin *uer-b-er* raises the further question whether the Greek root was not rather *φap*, and so one with that of the Latin *fer-io*.

Ἀγαθος as opposed to G. *gut*, old G. *kuot* and *gnot*, E. *good*. But surely it is somewhat strange that *αμεινων* should in like manner have taken the very same liberty of assuming a euphonic

vowel. Further as the L. *bonus* had the older form *duonus*, corresponding as regards the *u* with Ital. *buono*, Sp. *bueno*, this *duonus* may fairly be regarded as having itself come from a preceding *guonus*, nearly one with O. G. *kuot* (for the interchange of the initial consonants compare γλυκὺς and *dulcis*). Our own *bett-er* for *gwett-er* tends to confirm this; but how about *optumus*? I answer that *optumus* is itself compressed from *obotumus*, so that the Latin also had once an initial vowel, *o* rather than *a* in both syllables, in accordance with that habit already noticed in speaking of *αἴηρ*. The same view possibly accounts for the form of the Ital. *ebbene*, and possibly the Fr. *eh bien*. I have elsewhere ('Essays,' p. 136) given my reasons for the belief that the Latin *malus* grew out of a lost *am-alus* with a suffix like that of *μεγ-αλη*.

I take next a few instances of *ε* claimed as a euphonic prefix; as first *ελαχv-* opposed to Skr. *laghu-*, L. *lēvi-*, E. *light*. But with these may be united for consideration *ελαφο-* 'deer,' as also *λαγω-* and *lepus*, which our lexicographers with some reason connect with the G. vb. *lauf-en*, E. *leap*. The logical connection is quite satisfactory, and agrees with the derivation, of the Gaelic *leum-ach-an* 'a frog' from the vb. *leum* 'leap.' Precisely in the same way the Lat. *salmo* comes from *salio*, and signifies 'the little leaper,' and the S. *γᾱσα* (= G. *hase*, E. *hare*) from S. *γᾱς* 'leap.' But this being so, why may we not look upon *ελαφος*, *ελαφρος*, and *ελαχvς* as standing for more genuine forms *ἐλαφος*, *ἐλαφρος*, *ἐλαχvς*, which were compelled to drop the initial aspirate in consequence of the following aspirate, as in *εχω* and *τριχος*? In this way we are brought very near to the Gk. *ἄλλομαι*, and so to the L. *salio*. But *ἄλλομαι* itself at times in some of its tenses also drops the aspirate, just as the L. *alacer* dispenses with an initial *s*. Thus I claim *alacer* as substantially one with *ελαφρος*, with the special idea of nimble in leaping, as is shown in Sallust's phrase: "Pompeius cum alacribus saltu certabat." The Latin *sal-eb-ra* from *salio* I regard as implying a secondary verb *saleb-*, and E. *leap* as decapitated from some similar verb. But see the special chapter on such corrupted forms.

Ερωδιος as opposed to *ῥωδιος*. Here the L. *ardea* and still more

the E. *heron* are strong witnesses in favour of an original vowel ; nor can I leave out of view the forms *γέρανος* and *crane*, birds so similar in form to the heron, that their names may well be akin.

ἔλευθερος as opposed to *liber*. The older form of the Latin adjective was *loeber* or *loiber*, and this diphthong was generally, perhaps always, convertible with *ū*, so that I should not be surprised if I came across a form *lüber*. Then as regards the Greek word, I call to mind, that for a modern Greek it is pronounced *ἐλεφθερος*, and in such a form a *θ* is commonly ex-crescent. Further, as with *ἐλαφος*, etc., I suggested that an initial aspirate was sacrificed in favour of the *φ*, so *ἐλεφθερος* or *ἔλευθερος* is to say the least a possible form ; and then substituting, as usual, a L. *s* for a Gr. aspirate, and a L. *b* for a Gr. *φ*, it is no violent assumption that the Gr. adj. might have had for its Latin representative some such form as *soluber* or *solubilis* ; i.e. an adj. from *solu-ere* 'let go.'

ερυθρος opposed to Skr. *rudhira*, G. *roth*, E. *red*, *ruddy*, L. *ruber*, *rufus*, *robigo*. In the first chapter attention was drawn to the origin of the terms *vermilion*, *carmine*, *crimson*, and the theory, generally accepted, that *uerm-*, E. *worm*, etc., as erroneously applied to the coccus of India, supplied a name for this colour. Is it then a violent doctrine that *ερυθρος* stands for *ἑρ-υθ-ρος*, the suffix *υθ*, *ub*, *uf*, etc., being a suffix of diminution like the *m* of *worm* ? as in *κορ-υθ-* for *κορ-υφ-* and *hel-m* of *helmet* ?

Fr. *étant*, *étais*, *état*, etc. as opposed to *stans*, *stabam*, *status*, etc. The Lat. *stare* has already been treated as representing a lost *set-a-re* (p. 24), and so a secondary form from *set* of *si-s(c)t-ere*, the latter denoting the act of stopping, the former the state of stopping ; and under the idea of stopping are included those of *sistere sanguinem*, *lacrimas*, etc. ; so that thus far there is no limitation of the word to the upright position, which belongs to our English verb *stand*. Indeed we possess in our verb *set* a kindred use, as when we say 'the jelly sets,' i.e. takes a fixed form, in place of being a liquid. In Plautus the idea of standing is often expressed by the addition of a preposition to the verb in the shape *asto*, which is not to be regarded as compounded with

ad, but with *an* 'up' akin to *ava*, and one with the Aeolic *av* as seen in *αργαφεν*, *αυχωριξαντες* (Ahrens de Dial. ii. 354). But this Aeolic *av* before two consonants was cut down to a mere *a* (or *o*), as in *α-σταθι* (ii. 356), *α-μνασειεν*; *ο-στασαν*, *ο-σταθεις*, *ο-σκαπτω* (i. 149). Examples of *asta-* used of mere standing without the idea of *ad* 'near' are in Plautus numerous: as, "Cérto haec mulier cánterino rítu(d) astans sómniat," Men. 2, 3, 44; "uix ásto prae formídiue," Capt. 3, 4, 104; "qui in cólumine astat súmmo," Trin. 1, 2, 48, etc., etc.; and to these add, "astat quando edit," Naev. (Ribbeck, 26). No doubt *stare* with reference to the upright position had already come into use even in the time of Plautus, and this abbreviation was probably encouraged by the presence of the other *asto* (*adsto*) formed from *ad*, especially as the power of *a* for *an* was scarcely felt. Thus the Fr. *étant*, etc., may have owed its form to a Latin *astans*.

O also is often claimed as a mere euphonic prefix: as in

Ορνξ opposed to S. *nakha*, G. *nagel*, E. *nail*. Here *unguis*, *ungula*, *uncus* are witnesses in favour of *o*'s title; and again, as *ορνξ* is used alike of a nail and of a bird's claws, and *νσσω* again alike of a horse striking with his hoof, and of a bird piercing with talons, etc., I see no reason for doubting the connection of the two words. Moreover *νσσω*, in my view of the suffix *σσω*, is only to be explained by an earlier form *ον-νσσω*, a proposition I should have affirmed, had I not known of the existence of *ορνξ*.

Οφρυ- opposed to S. *bhru*, E. *brow*, but Pers. *abru*. May not the real explanation be that *οφρυ-* stands for *οφ-φρυ-*, so that the first syllable speaks of the eye, as in *οφ-θαλμος* and our *eye-brow*?

Ορομα as opposed to *nomen* has been already discussed, the result being in favour of an older *γον-ομα*. But let me add the evidence of the Keltic forms: Gael. *ainm*, Manx *ennem*, W. *enw*.

Οδοντ- as opposed to L. *dent*, A.-S. *tunth*, E. *tooth*, G. *zahn*. A Latin form more strictly corresponding to the Greek *οδοντ-* would be *ed-ent-*, which however I would not treat as a parti-

ciple, but rather, though still with doubt, as a dim. sb. from *ēd-* 'eat,' with a *t* growing out of the preceding *n*.

Ὀδυσομαι 'be grieved' by the side of *S. drish* 'hate' and the prefix *δus* 'male.' I only repeat that *υss* is no part of the root but simply a suffix, so that the *o* is a necessary element of the root: and hence looking at *δvy* 'misery' and *οδυνη* 'pain,' and assuming them to be connected words, I should hold the former to have lost an *o* rather than attribute a theft to the latter.

Ονειδος by the side of Skr. vb. *nīd* 'blame.' For one I cannot see how any doubt can exist as to the connection of *ονειδος* 'reproach, blame' with *ονομαι* 'blame,' *ονοστος* 'blamed,' and *ονοταζω* 'blame.' But *ονειδος* it is contended was at first a word of general meaning, 'character,' whether good or bad. I accept this and think I see an explanation in the L. *nōta* which of course I regard as standing for *ōnōta* (or rather *gōnōta*) with the sense of a mark or brand to denote quality, as we say 'Wines or tobacco of the first brand.' It is true that *ονειδος* eventually was limited to bad character or reproach. But the same was the fate of the L. *nota*, as it is of our adj. *notorious* and vb. *brand*. The Gr. *ονοταζω* by its form strongly confirms this etymon, and *ονειδ-ος* may have been corrupted from some such form as *ον-ο'αδ-ος*.

Ορεγω as opposed to L. *rego*. Stretching is here the leading idea, but it is in the upward direction that the difficulty generally shows itself, so that I cannot but connect the root of these words with the L. *orior* and Gr. *ορθος*, *ερ-εθ-ω*. Thus the vowel must belong to the stem. The G. prefix *er* of *erhaben*, *erheben*, *erlangen* is of the same origin, as well as of the same power.

Οβελος has been treated as deduced from a form *βελος* *m.* akin to *βελος* *n.*; but the meanings differ considerably, and *ελ* of *οβελος* may well be a dim. suffix, leaving *οβ* for the stem; unless indeed the Aeol. *οδ-ελος* be the truer form, so that the word might be of the same stock with *οδ-ος*.

So far we have dealt only with the asserted prosthesis of vowels; but there exist cases in which an inorganic consonant is said to be prefixed. Thus we have in our own language the co-existing forms *newt* and *eft*; so also to our English *adder*

corresponds the German ^{Natter}~~nadder~~. Again in the vocabularies edited by Wright in Mayer's 'Library of National Antiquities' there occur some eighty examples like 'hoc brachium' *a narne*, 'hic asinus' *a nass*, 'hec simia' *a nappe*. In these instances we have what Mr. Whitley Stokes has called Provection (see 'The Cornish Poem' edited by W. S. in Tr. Ph. Soc. for 1861-2, p. 83), the *n* having been transferred from the preceding word, *a narne* for example being substituted for *an arm*. Just so I remember the question at a breakfast table, "Would you like *an egg*, Henry?" being put to a child, and being answered by, "I should like *two neggs*." A similar solution may be given for the problem, why the Christian names *Edward* and *Edmund*, *Anne*, *Ellen*, *Helen*, *Oliver* lead to the forms *Ned* or *Neddy*, *Nan* or *Nancy*, *Nel* or *Nelly*, and *Nol*, for these may well have grown out of such combinations of affection as *Mine Ed*, *Mine Anne*, etc., when *my* superseded the older form *mine*, and so led to *My Ned*, *My Nan*, etc. And if *Ned* eventually led to the variety *Ted* or *Teddy*, an interchange of the nasal and the thin mute of the dental series is no way strange. We see it again in the French *ma tante* for *mon ante*. *For the nonce* is a familiar example of the transfer of a final consonant, representing as it does an older *for then once*, i.e. *for this once*. Another example is the old use of *the tone*, *the tother* in the place of *thet one*, *thet other*. In truth *then* is an older form of the pronoun, as seen in the so-called adverb but really gen. *thenn-es*, now *thence*; and *thet* is but a variety of *then*, with the interchange of the two dentals as just noticed.

The nasalization of initial mutes in Welsh again seems to be due to this principle of provection, as pointed out by Prof. Aufrecht (Trans. Ph. Soc. 1856, p. 51). Thus *p* or *b*, *c* or *g*, *t* or *d*, become severally *mh* or *m*, *ngh* or *ng*, *nh* or *n* under special circumstances, viz. if preceded by *fy* 'my,' the prep. *yn* 'in,' or the numerals *pump* or *pum* 'five,' *saith* 'seven,' *wyth* 'eight,' *naw* 'nine,' *deg* 'ten,' *ugain* 'twenty,' all of which in their nature are closely connected with the following noun; and all of which when traced to the older forms, ended with an *n*. Thus the simple numerals are precisely those which in Sanskrit have

this character, viz. *pancan*, *saptan*, *ashtan*, *navan*, *daṣan*, whereas the numerals for 2, 3, 4, 6 are W. *dau*, S. *dei*; W. and S. *tri*; W. *pedwar*, S. *catwar*; W. *chwech*, S. *shash*. Un the Welsh for *one* is indeed an exception; but Prof. Aufrecht explains this, "because it originally terminated with a vowel (*uno*)."
That the case of *fy* 'my' admits of the same explanation he justly contends on the evidence of the Gothic *mein*, A.-S. *mīn*, E. *mine* (now *my*). As examples of the interchange in Welsh it will be enough to quote *saith nant* as well as *saith dant* 'seven teeth' from *dant* 'a tooth,' *fy nysgu* 'my learning,' from *dysgu* 'learn.' Mr. Whitley Stokes in the 'Beiträge' has given examples of provection in other languages. Let me add to the stock some examples from a Sard dialect as seen in the 'Compendio della Dottrina Cristiana,' by Don N. Navoni, Cagliari 1835: *eun d'unu disigiu* 'with a desire,' p. 173; in *d'unu negoziu*, p. 179; in *dognia logu*, p. 185; a *dognia cosa*, p. 213—in which the *d* of *d'unu*, *dognia* (from *omai*—) is an outgrowth from the *n*, or itself part of the preceding word.

The doctrine of Epenthesis is another groundless invention of philologues; and I here take first the case of consonants said to be intrusive or inorganic. In the 'Essays' (p. 204-5 and p. 303-5), I have spoken at some length on this subject, dealing especially with Grimm's assumption (iii. 668) that the *n* of *g. prent-il-in-es*, d. *prent-il-in-e* from *prentili* 'a small brand' (*prent* with a *p*=*brand* with a *b* according to the usual change between the two languages) is an intrusive letter, because not found in the nom. *prentili*, an error from which he should have been guarded by the familiar case of the Lat. *uirgo uirginis*, *caro carnis*. Bopp again, as I have noted in the same place, treats the *n* of plural genitives such as *ácvá-n-âm* 'equorum' as intrusive, failing to see that the *n* is here the essential representative of the genitival notion, as in so many languages; and I may observe that he repeats the doctrine in § 312, or vol. ii. p. 69: "Der gen. masc. und neutr. lautet unregelmässig *éatur-n-âm* für *éatur-âm*." Similarly through failing to see that a *t* is often a substitute for an *n*, he treats the formation of *indiges indigetis* (iii. p. 362) as growing out of a truncated verb *ge* for *gen*, with

the addition of an inorganic *t*, saying: "In Ansehung des angefügten *t* vergleiche man die Erscheinung, dass im Sanskrit die Wurzeln auf *an* und *am*, im Fall sie . . . ihr *n* abwerfen, . . . ein *t* anfügen, daher z. B. *nī-há-t-ya* von *han* 'tödtten.'" So again *t* in *comit-*, *equit-* (ib.) is for him intrusive, whereas, if he had traced the verb *ire* to its earliest form, he would have arrived at *per-bit-ere*, etc. and *baet-ere*, that is, as has been already said, a vb. identical with the Greek *βαιν-* (stem *βαιν*), so that once more the *t* is due to a substitution of a mute for its nasal. Nay in note to p. 400 of the same volume we are taught that the *n* in *pig-n-us* and *faci-n-us*, in *τεμν-ος* and *δα-ν-ος* and the *θ* in *μεγ-θ-ος* are epenthetic, as if the two languages did not abound in secondary verbs from which such nouns might be deduced, such as *po(s)-n-o*, *sperno*, *τεμ-ν-ω*, *μανθ-αν-ω*, like our own *op-en*, *reck-on*, *list-en*; while in *μεγ-θ-ος* the *εθ* as a suffix is virtually one with the *n* of the Lat. *mag-'n-us*; and the *ν* of *δαν-ος* finds its best explanation in the old Lat. *dan-o*, and Platt Deutsch *duahn-en*. One of the boldest uses of this figure is where Bopp assumes that the *n* of the Lat. *mensi-s*, *ensi-s* is intrusive; and this, it seems, simply because the Sanskrit knows only the forms *as-is* 'a sword' and *mās* 'the moon,' and the supremacy of Sanskrit is for him undoubted. But the Latin double forms *quotiens quoties*, *infans infas*, *Megalensia Megalesia*, might have taught him otherwise. The simple fact is that an *n* before *s*, though still written, was often dropped in pronunciation, which is no doubt the true explanation of the old assertion that the *i* in *insanus* was long, i.e. long in itself, not merely long by position. The Greeks followed the sound with greater accuracy, when they wrote *εις*, *είς*, *τυφθεις*, *οδους* (*οδοτος*), *όδους* acc. pl., *πας*, for *εvs*, *έvs*, etc.; and even in Latin *cos* represents *consul*. More examples may be found in the V. G. on reference to Arendt's Index under 'Euphonische Gesetze.'

Buttmann is another scholar of high standing who assumes the 'Einschaltung' of inorganic consonants. Thus according to him the *σ* of *τετελεσμαι*, *ηνυσμαι*, *έσπασμαι*, is intrusive; so also the *θ* of *βαθμος* *κλανθμος* (cf. *κεκλανσμαι*); but for three of these the sb. *τελεσ-* (*τελος*), the adj. *νευρο-σπαδ-εσ-*, and the verb *βαιν*

{*βαυω*) point to a different explanation, and I have little doubt that in all of them the said intrusive letter is really a native.

The French have the habit of writing the *t* as though it were a foreign element, in *aime-t-il*, whereas of course it is here but the final consonant of the Latin *amat*. An insertion of what is called an epenthetic consonant is sometimes explained as ‘hiatus nitandi causa,’ for example in *red-ire*; but in fact *red* (*ret*) is an older form than *re*, so that it is seen in *red-duco*, *ret-ro*, and is assimilated in *relligio*. The same applies to *prod-ire*, *prod-esse*, *praed-opto*.

But this doctrine of epenthesis is used also of vowels said to be inserted for euphony. As a first example we may look to what is called the connecting vowel, ‘Bindevokal,’ in the formation of compound substantives or adjectives, as in *θηρ-ο-φωος*, *nuc-i-frang-ib-ulum*, but here we have really the remnant of a genitival suffix. In *agrimensor* and *agricultura* our dictionaries cannot plead the authority of any poet for the quantity of the *i*, but of course, if the two parts are written separately, the *i* must be treated as long. *Agricola* indeed has a short *i* in Plautus, but this also may be the result of a corruption from *agrī-col-a*. And here we may safely rely on what we find in our own and other modern languages. When a German writes *mond-en-licht*, *has-en-lage*, he has clearly in the middle syllable a genitival suffix. So again Chaucer has the earlier and fuller form in the last word of: “Him thought a man stood by his *beddis-syde*” (v. 16565); but we have lost all trace of the suffix in our modern *bedside*. Only a partial loss has taken place in

Til *Soneday* the sonne was gon to reste;—v. 3422.

At *Crystemesse* wel mery may ye daunce;—4546.

———— myn *eighesight*;—7642.

And were anhonged by the *nekke boon*;—16548;

Whan that hir *housebond* had lost his lyf;—16850.

Again that the Greeks did not insert the so-called *Binderokal* for facility of speech seems to be proved by the existence of such compounds as *ιχνοπωλης*, *φυσιολογος*. Indeed Buttmann himself has the remark (§ 120, 5, Anm. 4): “After a *v* those

only take an *o* which in the gen. have *vos*, as *πιτυοκάμπτης, δακρυοποιός*." So too the forms *δικασπολος, θεοσδοτος* (Pindar), *θεσφατος* seem to receive their easiest explanation in the theory that the *σ* marks a genitival suffix, for at the outset of things the case suffixes must have been the same for all declensions.

Even in such words as *λογοποιος, θεομανης*, in which it is commonly assumed that the first elements are nouns in the crude form, it would probably be more correct to look upon them as corrupted genitives.

The assumption of a connecting vowel plays also an important part in the ordinary treatment of the personal ending of verbs. Thus Buttmann (§ 87, 6) gives this name to the vowels *o*, *ε*, and *ει* in *λύο-μεν λύ-ε-τε λύ-ει-ς*; and Bopp (§ 507, 508) so treats the Sanskrit vb. *váh-â-mi vâh-a-si vâh-a-ti; vâh-â-ras vâh-a-tâs vâh-a-tas; vâh-â-mas vâh-a-tâ vâh-a-nti*; and the Latin *ueh-o ueh-i-s ueh-i-t; ueh-i-mus ueh-i-tis ueh-u-nt*. The hyphens in the words just given are Bopp's own; and in § 431 (p. 261) he expressly says, "*â* in Formen wie *tud-â-mi* angehört weder der Wurzel noch der Personal." Now as regards the assertion that the long *a* in the first persons sing., du., and pl. of the Sanskrit verb, and the *o* of *ueh-o* and *λυομεν* have only to play the part of a connecting vowel, I would put forward the counter-assertion that they constitute an essential part of the pronominal suffix. The crude form of the first person pronoun in S. is admittedly *asmat*, and the letters *asma* show themselves in most of the plural forms of the pronoun. But more than this, *asmi* itself occurs as an independent nom. in Vedic writings, as shown by Dr. Goldstücker in his Lexicon, but I do not think we should admit the theory put forward by himself, that we have here an anomalous use of *asmi* = *sum* for *ego*. The Greek *ἡμεῖς* for *ἡμετ-ες* and the adj. *ἡμετ-ερος* agree substantially with the assumed crude form *asmat* of Sanskrit grammarians, and indeed the Latin *egomet* also. Thus I venture to differ from Sanskrit scholars, and claim *vah-âmi vah-â-ras vah-â-mas* as the true division of the forms. The same argument applies to *ueh-o, λυομεν*, and *τυπτ-ομ-αι*. And again in the 3rd p. pl. *vah-anti, λεγ-οντι* or rather *λεγ-οντι*, and *ueh-unt*, the Welsh *hwynt* 'they' is alone

enough to show us that the pronominal suffix of these forms had a vowel of its own before the *nt*. Even in the S. forms *vah-asi vah-ati*, etc., it is far from impossible that the vowel which precedes *s* and *t* may be a genuine letter of the suffixed pronouns, seeing that in the first person *με* grew out of an older *εμε*. But these are questions that may be more usefully discussed under the head of the pronouns.

Even in other places Bopp makes a bold use of the theory of connecting vowels. Thus in vol. i. p. 219 he divides *στον-ε-νν-μι* as here written with the remark that *ε* is only "ein Hülfsvokal zur Erleichterung der Aussprache." Again in the next page (p. 220) we are informed that in *πετ-α-νν-μι* and *σκεδ-α-νν-μι* *α* stands "als Bindevokal." So again in p. 313 we are told that in the accusatives S. *ῥάταρ-α-μ*, L. *frātr-e-m*, the vowel before the *m* performs the same office. Nay he adds that if monosyllabic nouns in *ι*, *υ*, *ου* add *am* rather than *m* as an accusative-suffix, it is probably for the purpose of obtaining for them in this way 'Mehr-sylbigkeit'!

Under this head I may also enter a protest against the doctrine that poets *metri causa* may lengthen syllables in themselves short, the truth being that, the older language is, the fuller are its forms; and when the necessities of a bustling life lead to a shortening of such forms, the poet feels himself entitled, nay from a natural love of the antique invited, to the restoration of what for ordinary life is obsolete. Thus a student is apt to form an erroneous conception of the fact, when he finds in a lexicon: *αρω*, fut. *αροσω*, poet. *αροσσω*, or *μαχομαι*, fut. *μαχεσσομαι*, Ep. metri grat. *μαχεσσομαι* . . . aor. *εμαχσαμην*, Ep. *μαχεσσασθαι*. But this again is a matter which will be dealt with more at length, when I have to speak of the fut. and 1st aor. of Greek verbs, and hope to show that *αροσσω*, *μαχεσσομαι* are the original forms.

The doubling of the liquids in *ελλαβον*, *εμμαθον*, *εννεον*, *ερρεπον*, *περιρροος*, is probably due to assimilation of two consonants, the simple stems *λαβ-*, *μαθ-*, *νε-*, *ρεπ-*, *ρε-*, having lost an initial consonant or more (see below).

Those who assume that at times a meaningless addition is made to the end of a word, employ the term *paragoge* to express

the thought; but here again the order of facts has been inverted, the fuller form being the older, and the shorter deduced from it. Our English grammars once taught us that the so-called indefinite article was *a*, but that before a vowel an *n* was added 'hiatus vitandi causa;' but of course the rule is now abandoned for one of a more reasonable character, that *an* is the original word, the same in fact with the Scotch *ane* and our own *one*, as in *an apple*; but as *an pear* was of somewhat difficult pronunciation, a *pear* superseded it. Precisely in the same way our older Greek grammars speak of the *α* privative, which they say assumed a *ν* if the word attached to it began with a vowel; and even to the present time some Sanskrit grammars repeat the error. Such forms as *αεκων*, *αελπτος*, *αυπνος* present no solid objection to this view, for they have in all probability lost a consonant, *αυπνος* for example having superseded a form *ασυπνος*, while *εκων* is probably akin to *s(e)ponte* of the Latin, and, if so, has also lost an initial *σ*. Similar errors, I think, prevail in the treatment of *ουκ* as standing for *ου* when a vowel follows, also in the words: "*μέχρι*, and before a vowel or *metri gratia μέχρις*;" and in Legonidee's Breton Dictionary, as: "*Enn*, prep. pour *é* 'dans' devant les voyelles."

But the so-called *ν* *εφελκυστικον* is the great offender. The forms which give rise to the question are for the most part the following:—1. the Homeric dat. *ουρανο-φιν* or *-φι*; 2. the dat. pl. *ποδεσσιν* or *ποδεσσι*, *λογουσιν* or *-σι*, etc.; 3. the so-called locative is *Αθηγησιν* or *-σι*, which are closely allied to the preceding; 4. pronouns with the demonstrative suffix, as *οὔτος-ιν* or *-ι*; 5. the enclitic particles *κεν* (*κε*) and 6. *νν* (*νν*); 7. the third person sing. *εστιν* or *εστι*, *τιθησιν* or *-σι*; 8. 3rd pers. pl. *λεγουσιν* or *-σι*; 9. the adverbs of whence, as *οπισθεν* or *-ε*; 10. the numeral *εικοσιν*.

Now in nearly every one of these classes there is good reason for claiming the nasal as an essential element of the word. The suffix *φιν* is in all probability one with the old Scotch independent word *ben*, whence the comparative *benn-er* and superl. *ben-most* in the sense of our *inner* and *inmost*; and indeed *ben* also appears as a suffix in the old Scotch *ther-ben* or *thairben*

‘within.’ Further this *n* accounts for the long quantity in *no-bīs*, *uo-bīs*. The old Prussian too has for the suffix of the pl. dat. *mans* (see Nesselmann, and Essay^f, p. 29D). The cases of *λογο-ισ-ιν* and *ποδ-εσσ-ιν* involve some difficulties, which may perhaps be considered hereafter. The *ι* of *ουτοσι* is one in power with the *c* or rather *ce* of *hi-c*, *his-ce*, *hi-ci-ne*. But when I have to deal with the third person pronouns I shall give reasons for claiming a final *n* for this Latin particle, so that an earlier form was *cen*; and this again I hold to be one with the so-called interjection *en* ‘behold,’ so that I have no difficulty in laying claim to *ιν* of *ουτοσιν* as the very same word. That *κεν* the Greek particle is a truer form than *κε* is all but proved by the form of the kindred *αν* of like meaning. *Κε* has the one distinction from *κεν* that it is always an enclitic; and we know that it is the habit, and I may add a very natural habit, of enclitics to drop a final consonant. Thus *ue* is of course corrupted from *uel*; and if my argument (Essays, No. 7) be sound, the Latin *que* and *et* originated in a common *quet*, the former as an enclitic dropping the final *t*. As for *νν*, Buttmann (§ 26, Anm. 2) disposes of the question by simply pointing out that the particle *νν* is undeniably one (*einerlei*) with *νιν*. I pass to the verbs; and in *εσ-τιν* insist upon the *ν* as a true portion of the pronominal stem, for proofs of which I refer to what will appear hereafter. The *ν* in *ετυπτεν* and *ετυψεν* is evidently the representative of the *t* which is the ordinary suffix of the third person in a Latin verb, but for a Greek ear was inadmissible as a final. A clear proof of this is seen in the reflective forms *ετυπτετ-ο*, *ετυψατ-ο*, where no longer terminating a word, the *τ* recovers its position. In *λεγοντ-ιν* and such forms the *ον* belongs to the pronoun, *ιν* being a suffix of plurality. In the adverbs which denote ‘whence,’ *εν*, I feel convinced, is the genitival suffix corresponding to the genitival *us* in Latin adverbs of like power, as *int-us* ‘from within,’ and *es* of old E. *whenn-es* now written *whence*; the *θ* of the Greek adverbs and the *t* of the Latin being outgrowths from the preceding consonant, as explained below and in my tenth Essay; while in *ποθ-εν*, *ουρανοθ-εν* the *θ* belongs to the preceding part of the word. The word *εικοσι* remains; but the

variety *εικατι* is somewhat nearer the original form, and still more so the Latin *uiginti* for *duiginti*, and our own *twenty*, i.e. *twain-ty*. But the element *ty* (G. *zig*) has itself been cut down from a disyllabic form *tigen* = L. *decem* and S. *daçan*. The German *zehn* is also one with *zeh-en* the 'digiti' rather of the hand than of the foot, to which the word, like its E. analogue *toe*, is now limited. Thus we arrive again at a final nasal which indeed has been preserved in our compressed *ten* and *teen* of *thir-teen*, etc. The forms *παλιν* and *παλι* both occur in composition, but here historical evidence is in favour of the former, seeing that the compounds with the shorter form are ascribed exclusively to the later writers. I have thus dealt with nearly every one of the several classes, giving reasons, I hope sound reasons, in defence of the title of the nasal. But there are other general arguments which ought to tell. Buttmann justly scouts the doctrine that the *ν* was adopted for the purpose of preventing the concurrence of vowels, and quotes the line of the *Odyssey* (β. 166),

Πάντεσσιν' πολέσιν δὲ καὶ ἄλλοισιν κακὸν ἔσται.

He further notices the habit of generally retaining the *ν*, when *εστιν*, etc., close a sentence, in which case the difficulty of the 'hiatus' does not arise. On the other hand it was very natural that, when a following word began with a consonant, a final *ν* should be dropped; and again, that, when a vowel followed, it should be retained. This is precisely what occurs with our *a pear* and *an apple*, with the French *il aime les moutons* and *aime-t-il les moutons*. Yet another strong argument lies in the fact that the loss of a final *n* is of the commonest; and this especially, as Buttmann observes, in the Ionic dialect; and L. and S. tell us at the close of their article on this subject: "In Ionic prose this *ν* is usually omitted." Lastly I would ask why the letter *n* of all the consonants is selected for the ignoble office of a stop-gap.

Another example already noticed of a letter alleged to be paragogic is the *c* of the Latin *iunic-*, which Bopp (1, 269) calls a "durch ein angefügtes *c* erweiterte lateinische Stamm," and this, it would seem, solely because the S. *yúni* of the same meaning ends with an *i*; and on the same ground he deals with *datrí-c*, *genitrí-c*, as compared with the S. *dátr-i* 'Geberinn,'

janitr-i 'Erzeugerinn.' Again in p. 290, § 142, in every case where a feminine adjective or substantive of the German family of languages exhibits a final *n*, he asserts that such *n* is a late addition, "ein unorganischer Zusatz."

On general principles then I contend that *μῆχρῖς*, *ἀχρῖς*, *ἀμφῖς*, and so on, are older than the forms without the sibilant, *οὐκ* than *οὐ*, *οὕτως* than *οὕτω*, *ἀφῖως* than *ἀφῖνω*; *haut* than *hau*, *uidebaris* than *uidebare*, *scripserunt* than *scripsere*, the *tis* of *scribitis* than the *τε* of *γραφετε*, *Στραβων* than *Strabo*, the suffix *μῖ* of Greek verbs than the suffix *m* of Latin verbs, *sin* 'if' than *si* 'if.' So also the prep. *ec* (*ἐκ*) is older than *ē*, *ab* than *a*, the W. *cyn* or *cyd* 'with' than *ey*. But I do not say the same of *ex* (*ἐξ*), *abs*, *obs*, as compared with *ec*, *ab*, *ob*, because here I recognize a fuller suffix of which the sibilant is but a remnant; but this is a point to which I shall recur hereafter.

But there remains yet another pair of forms as to which the order of time has been amusingly inverted. *Landarier* we are often told is formed by paragoge from *landari*, when confessedly *landarier* is the more archaic form. But the formation of a passive or rather reflective verb should have prevented such an error, the *ur* or at least the *r* being an essential part of the required suffix, so that from *laudare* we might have expected some such word as *laudareur*, and the difference between this and *landarier* is none at all for an English ear; and for the eye precisely that which exists between the vowels of *red-iens* and *red-euntis*.

Unhappily the authors of Greek grammars encourage the notion of paragogic consonants by their habit of dealing first with the abbreviated forms, and so suggesting that the longer varieties are rather monstrosities than otherwise.

Occasionally an ambiguity of language occurs which may suggest wrong conclusions, as when we find in a lexicon: *ἐφαίνω* . . . lengthened from root *ἐφ*, as though the suffix *av* in this verb was originally added without carrying with it a meaning of its own; and similarly Buttmann speaks of the difference of *λαμβ-av-* compared with *λαβ* of *ελαβον* as "eine Verstärkung." I hope to speak in a more definite manner when I have to deal with this suffix below.

The term *diaeresis* again distorts the facts, and must resign its office in favour of the opposite term *crasis*. It so happens that a student of Greek is apt to commence with the writings of an Attic author, such as Xenophon; and subsequently proceeding to the work of Herodotus, he regards the many-vowel idiom of the latter as a deviation from what he conceived to be the standard of the language, whereas the truth is that the busy life of Athens led to the contracted forms which characterized the language of that city. Similarly *mi-luus* and *la-rua* are trisyllables in Plautus, but by a change of quantity in the first syllable from long to short, the usual direction of such change, passed to disyllabic forms, *mīl-uus lār-ua*, the *u* now commencing the second syllable, and so taking the sound of an English *w*. *Seine* again in an old inscription (CIL 198, 54) must not be regarded as a blunder because in the later language the preposition is known only as a pyrrhic *sinē*. For another example I may take the ordinary *sītis* as opposed to *sītis* 'thirst,' which occurs in a line from an old poet quoted by Cicero (Tusc. 1, 10): "Ménto summam aquam áttigens (MSS. attingens) enéctus sīti Tántalus," for such is the order of the manuscripts, as well as of Priscian and Nonius. And here the etymon of the word confirms the quantity, for the word cannot be separated from *siccus*, so that an older form must have been *sictis*, in which the *t* was probably an outgrowth from the *c*. But again, as *pars partis* unites in its declension two crude forms *par-* and *part-i(c)*, so *sictis* points to a simpler *sic-* (n. *sia*); and thus as the Lat. *nix* has for its Portuguese analogue a form *neve*, so our theoretic *sia* serves to explain the Port. *scve* 'thirst,' as well as the Fr. *soif*. Lastly, let me note the Welsh forms *sych* 'dry,' *syched* 'thirst,' and the Gr. *δυσία*.

Tmesis is another example of inversion, and I propose to install *synthesis* in its place. Passing from Xenophon to Homer the student comes across frequent forms of speech in which the preposition and the verb had not yet coalesced; and then, in careless forgetfulness of the direction in which the stream of time runs, he looks upon the Homeric form as a peculiarity and innovation. Hermann has taken special notice of this error in

his treatise 'De emendanda Graeca Grammatica' (p. 117), whose words are sufficiently definite: "Tmesin nihil esse nisi inanem grammaticorum fictionem . . . Atque omnino nescio utrum tmesis ἀπὸ πατρὶ δόμεναι, an magis σύνθεσις, ἀποδόμεναι πατρὶ adnotanda fuerit." He then quotes a passage from Wolff's preface to the 'Odyssey,' showing that that scholar took the same view.

The main doctrines against which I have been here contending are those which claim the right of adding foreign letters to a word without any addition to the idea. No stronger example of this fallacy is to be found than the common practice of regarding the final syllable or syllables of a word as a meaningless addition, 'only a termination;' and unhappily some of our first writers on philology have lent their sanction to the error Niebuhr for example in p. 53 of his second volume (the Eng. transl.) says that "the last syllable (*ceps* of *municeps*), though it has a deceptive look of coming from a verb, is nothing more than one of those manifold terminations in which the Latin language luxuriates;" and in a note we receive further etymological information: "That the additional syllable does not affect the meaning is evident in *princeps* for *primus*, and in the consecutive ancient ordinals given by Varro, *terticeps*, *quarticeps*, and the rest. So *biceps* probably meant nothing more than 'twofold,' *triceps* 'threefold.' " Subsequently he refers to *anceps* as another proof of his principle, and ridicules the idea that *cap* of *caput* or *capere* enters into any of these words. By an awkward omission he leaves out of view *auceps* and *praeceps*, two words which I suspect he would have found it difficult to explain without some reference to the roots just mentioned. But the same are also needed for expressing the ideas conveyed by *municeps*, *princeps*, *biceps*, and *anceps*. Thus the first pair of these words mean *qui mune* (the lost singular of *munia*) *capit* or *capessit*, and *qui primas* (sc. *partis*) *capit*; while *anceps* and *biceps* are equivalents of our 'double-headed.' Again, under *αλλοκοτος* in Liddell and Scott's lexicon we find a reference to some unnamed writers: "Others derive it directly from *ἄλλος*, regarding *-κοτος* as a mere termination." See too *νεοκοτος* in the same work.

CHAPTER VII.

METATHESIS.

METATHESIS, as a grammatical figure, for which 'Umstellung' is the term with Bopp, may claim a middle place between those which are groundless and those which are entitled to our unqualified respect. Within a very limited sphere it may be accepted as a truth; but in a large majority of instances it is applied, I think, without reason and sometimes recklessly. To quote examples of the latter class with the names of the writers would for the most part be alike invidious and unnecessary; but it is desirable to nail to the counter a few instances, a few glaring instances, of derivations which offend under this head. One writer would connect *nīt-or* and *τειν-ομαι*; but of course the latter word has its analogue in *ten* of the Latin *tendo*; while *nitor* in its earlier form had a pair of gutturals *gnict-or*, and so is a derivative from *geuu(c-)* 'the knee,' whence the dim. *genic-ulum*. This origin is placed beyond doubt by its meanings: 1 'to kneel,' 2 'to use the knee as a fulcrum' and so 'strain.' In another quarter I find the Latin *uinco* identified with *νικαω*, or rather, as the writer ventures to put it, *νικαῖω*; the letters of which, if tossed in a bag and then thrown out, might by a happy accident take the form *ῖνικαω*, although even then the *α* would be of little service. Again *uaco are* is held by another to be an equivalent of a theoretic Greek verb *φαχω*, by metathesis for *χαῖω*, by which is meant, it would seem, some earlier variety of *χαυω*. But this extravagant habit is as old as Plato. In the 'Cratylus,' § 405, he says: "The name of the goddess *Περα* may be only a disguise of *αηρ*, putting the end in

the place of the beginning." But he adds by way of softening the difficulty: "You will recognize the truth of this, if you repeat the letters of *Hera* several times over" (as, *Hera Hera Hera*—where of course the sound *aher* is heard).

Such strained applications of the figure metathesis few will hesitate to reject. Yet they are scarcely more violent than some which have found favour with philologues of high repute, as in Bopp's derivation of the Gothic *hanfa* 'one-handed,' or of the Armenian *aran* 'man,' and the Erse *ionga* 'nail,' as exposed in my 'Essays,' pp. 306-7.

But there are more sober dealings with this figure, which, though plausible, are believed to be no less erroneous. A *prima facie* case in favour of the doctrine of metathesis seems to be made out when the eye has before it numerous examples, such as *θαρσος θρασος, καρτερος κρατερος, καρδια κραδια, Καρπαθος Κραπαθος, βαρδιστος βραδιστος, αταρπος ατραπος, κirkos κρικος, εμολον βλωσκω, εθορον θρωσκω, στορινυμι στρωννυμι, πελω επλεν, πετομαι πτερον, σκελλω σκληρος, δεμω δεδμηκα, τεμνω τετμηκα, εθανον τεθιγηκα, βαλλω βεβληκα, καλεω κεκληκα; por* of *porrigo* = E. *for* and *pro* (προ), *sper-no spretus, cerno certus* and *se-cretus* and *cribrum, fern-o* E. *brew, torqueo* E. *throw, κοραξ coruos* E. *crow, fqrth frith*, E. *horse* and G. *ross*; and especially if we include our provincial dialects, as *bird brid, perty pretty, gars grass, hirsch rich, hursh rush, hird red*. The Anglo-Saxon as compared with modern English would furnish abundant examples.

It will at once be observed that in these instances, whenever the vowel before the *r l m n*, for these are the letters chiefly concerned, disappears, we find a vowel of the same form, or at least a kindred vowel, after the liquid. The idea therefore naturally suggests itself that the vowel has been playing, so to say, at leap-frog, or in more learned phrase that metathesis has taken place. But a few considerations will dispel the suspicion. In the first place a suffix in its origin was an independent word with a definite meaning of its own, and if so must have possessed a vowel of its own; and the same is true of the root-syllable to which the suffix is attached. Thus *θαρ-σ-ος* and *θρ-ασ-ος* point to a fuller *θαρ-ασ-ος* of which the first syllable is

one with our *dare*. *Κῆρκος* and *κῆρκος* imply a trisyllabic *κῆρ-ικ-ος*, the first syllable of which appears in *cur* of the Latin vb. *curro* 'revolve,' in E. *cur-l*, and probably also in the Gr. *γῦρ-ος*. *Βλωσκω*, *θρωσκω*, etc. have a suffix virtually one with *ασκω*, *εσκω* etc., and the root-syllables were no doubt *μολ-* and *θορ-*, so that the fuller forms of the secondary verbs were *μολ-ωσκω*, *θορ-ωσκω*. That *coruus* was at first a trisyllabic word *cor-ou-us*, and *crow* a disyllabic *cor-ow*, is proved both by the Gr. *κορ-ακ-* and the S. *kar-at-a*. The preposition *pro* has been cut down from *prod* (*prod-esse*) and the Greek *προ* from *προς*, so that we have here the corruption of disyllabic forms *por-od* and *πορ-ος*, *i. e.* secondary forms from the simple *por*, still preserved in its simplicity not merely in *por-rigo* but virtually in *pol-liceor* and *pol-lingo* 'lay out' (a corpse). These suffixes will come under notice in the sequel. The verb *σπρωννυμι* for *στορ-ωνν-ν-μι* (for the grounds of this division see below) seems to owe its *ω* to the silence of the first *ν*; and on the other hand *στορ-εινν-ν-μι* has perhaps superseded a form *στερ-εινν-ν-μι*, corresponding to the L. *sterno*. N in many cases, alike in Greek and Latin, was often written though not pronounced. This in Latin was especially the case before *s* and *f*, so that *ensor* and *consul*, for example, were pronounced and at times written as *cesor* and *cosol*, *Constantinus* as *Costantinus*, and then a transliteration into Greek gave *κησωρ*, *Κωνσταντινος*. So probably in pronunciation the first *ν* was ignored in *σπρω(ν)νυμι*, *ῥω(ν)νυμι*, *χω(ν)νυμι*. Our *through* and the German *durch* are no doubt the same word; but the fuller and more genuine form is seen in our *thor-ough*, the simple preposition, from which the German *durch* is a derivative, having once existed in the form *dur* (Grimm, D. G. iii. 261). Nay *thorough* itself is used as an ordinary preposition by Shakspeare in "thorough brake, thorough briar; thorough flood, thorough fire."

But one difficulty still remains for solution. Whence, it will be asked, is it that the vowel of the suffix is so generally either one with that of the root, or closely akin to it? A complete answer is at once supplied by the doctrine of assimilated vowels.

Further as a general principle I would suggest, that, where

two consonants are found in juxtaposition, a fuller form may be anticipated, especially where the second of the said consonants is a liquid, as in the words we have been discussing. Thus *plus* suggests a form *pol*, which is seen in the Greek πολυ πολλοι, and virtually in our *full*. *Creber* is less genuine than *celeber*, κρυπτω than καλυπτω, *crux* than σκολοψ, *crus* than σκελος. Κεκαλῃκα, which has been assumed as the form which was crushed to κεκληκα, would be in keeping with κεχαρηκα from χαιρω. The Polish variety of the Slavic family abounds in words which begin with a mute and liquid followed by the vowel *o*, while in the Russian we have the fuller form with another *o* between the mute and liquid: *glod golod* 'hunger;' *glos golos* 'voice' (cf. γλωσση); *klos kolos* 'ear of corn;' *sloma soloma* 'straw' (cf. calamus); *gorod gorod* 'city;' *prog porog* 'threshold;' *broda boroda* 'beard.'

Again one whole class of cases I regard as constituting what I may call simulated metathesis. Consonants of the same order, so to say, are often convertible with each other, as gutturals with gutturals, aspirates with aspirates, tenues with tenues, and so on. One is no way surprised therefore to find the Greek σταδιον passing in the Aeolic dialect into σπαδιον, and so giving origin to the Latin *spatium*. Similarly σκωρ σκατος, whence σκερ-βολος 'one who throws dung or dirt,' is of course of the same stock with the L. *stercus* and probably with the L. *spureus*. So *spatula* 'a blade' must be substantially one with *scapula*. Here as the *p* of the first word has given place to a *c*, there has been a tendency to compensation in the second part by a reverse change.

Labials again are interconvertible; and accordingly one is not surprised to find μυρμηξ and *formica* as names of the same insect. Precisely in the same way the initial consonants vary in the nouns μορφη and *forma*, but this again has been with compensation in the second syllable. *Carthago* and Καρχηδων are names of the same city; but which of the two is nearer to the Phœnician term we need not discuss. If the former, then the dental aspirate has given place to a guttural aspirate in the Greek; and by compensation the medial guttural that follows to the medial

dental δ . As the liquids r and l have a readiness perhaps beyond all other letters to interchange, it was an easy matter for the Latin *miraculum* to substitute an l for the r , and then by compensation an r for the following l , so as to produce the Span. *milagro*. When we compare the Latin *spec* of *conspicere spectare* with $\sigma\kappa\epsilon\pi$ of $\sigma\kappa\epsilon\pi\tau\omicron\mu\alpha\iota$, we have apparently a clear case of metathesis. But this is very doubtful. Our English vb. *see* and in truer form the German *seh-en*, confirmed too by our *sigh-t*, should under Rask's law have for an analogue in the classical languages a form *sec*. I think I see this in the vb. *sec-are*, more clearly still in the forms *sec-ui sec-tus*, for the idea 'divide' is generally found in connection with that of vision, which consists in the separation of the objects presented to the eye. Thus *cernere* is: 1. 'to sift or separate;' 2. 'to see;' and *video vidi* can scarcely be separated from the compound *di-vido*. So too *scio* may well, as regards alike form and sense, be regarded as of the same family with *scindo* and $\sigma\chi\iota\zeta\omega$. Nay this very verb *scio*, whose more genuine form is *sc-isco*, can have its essential part only in the *sc*, and so is a contraction probably from *sec-isco*. But 'to see,' like 'to know,' represents not a momentary but a continued act or state, and as the one takes the suffix *isc* to denote this difference (see below), so a suffix *ec* is well fitted to perform the same office for the root *sec*. But *sec-ec-* has for the ear an offensive repetition of the guttural; and the evil is at once corrected by the substitution of a labial. The only difference then between the two languages is that the Latin makes the substitution for the first guttural, *s(e)pec*; the Greek for the second, $\sigma(\epsilon)\kappa\epsilon\pi$.

The verb $\tau\iota\kappa\tau\omega$ has been thought to be a corruption of a more legitimate form $\tau\iota\tau\kappa\omega$, which, as representing a contracted $\tau\iota\tau\epsilon\kappa\omega$, would correspond to *gigno*, $\mu\iota\mu\eta\omega$, etc.; and if so, we have again an instance of change followed by compensation. So it is perhaps rather compensation than metathesis that we see at work in $\theta\rho\iota\zeta\ \tau\rho\iota\chi\text{-os}$, $\theta\alpha\pi\tau\omega\ \tau\alpha\phi\omicron\varsigma$, $\chi\alpha\lambda\kappa\eta\delta\omega\iota\varsigma\ \chi\alpha\lambda\chi\eta\delta\omega\iota\varsigma$.

I will conclude this part of the subject with an incident that bears upon it; and one not the less valuable, that it occurred with a child only two or three years old. Seeing on a drawing-

room table the to him unusual sight of two teapots, one for green, the other for black tea, in his attempt to exclaim *What two teapots!* he ran stuttering through all the permutations of the consonants *t* and *p* taken four together, *poo peapots, two peatops*, etc.

But I do not refuse assent to the doctrine of metathesis altogether, especially in the case of the liquids *r* and *l*, as *Crotona* and *Cotrone*, *ταφρος* of ancient Greek superseded in the modern language by *τραφος*, the Latin *temperare* and *finbria* leading to the Fr. *tremper* and *frange* (our *fringe*); so too *αμθρος* *αμθρεω* got into use for *αριθμος* *αριθμεω*. Again we find in Bohemian *kopriwa* ‘a nettle,’ with Russ. *kropiwa* (Dobrowsky’s Boh. Gr. p. 32). The Greek too supplies an example in *οχος* by the side of the Aeol. *ολχος* and Cretan *πολχος*, connected possibly with the noun *πολλος*, as also with *πλ-ηθης* and *pl-ebes*, perhaps too with our *folk*; but not so with the Latin *uolg-us*, which comes from *uolu-ere* (Ital. *volg-ere*), whence *uolg-are*.

But the strangest and most frequent metathesis is that of *ks* with *sk*, of *ps* with *sp*, which is best seen in the Anglo-Saxon. Thus Grimm (D. G. 251 and 267) gives us:—

1. axe	asce	cinis	ashes
âxjan	âscejan	poscere	ask (ax)
frox	frosc	rana	frog
fixas	fiscas	piscis	fish
tux	tusc	dens maxillari ^s a	tusk
2. vāps	vāsp	vespa	wasp (waps)
āpse	āspe	tremulus	asp-en tree
hāpse	hāspe	sera	hasp
vlips	vlisp	blaesus	lisp-ing
cops	cosp	compes	fetter

So we have still a *whips* of straw in Kent for *whisp*. Again *Eske* and *Ere*, as the names of rivers, represent no doubt the same word, while the classical languages supply several pairs, as *Fiξος* and *uisus*, *misceo* and *mixtus*, *εσχ-ατος* for *εξ-ατος* (EXΞA-TOS). Yet even here the principle of compensation may have

been at work, for the sibilant and guttural are often interchangeable, as is familiar to Sanskrit scholars. So the Slavic *soloma* = *calamus* and a familiar instance is Lat. *cum* = Gr. *σνν*. Then the *ps* of the second series may very possibly have grown out of an older *ʼs*.

CHAPTER VIII.

EXCRESCENT CONSONANTS.

THE grammatical figures so far discussed are for the most part simply errors resulting from an inverted chronology. In some there is a very limited amount of truth, as in the doctrine of initial vowels prefixed for euphony, of connecting vowels, and of metathesis. I proceed next to the consideration of what I have proposed in my tenth Essay to call 'Excrecent Consonants.' And here I may at first sight be thought to be acting in violation of the principles which led me to reject *in toto* the doctrine of epenthetic consonants. My answer is, that there is a complete difference between the insertion of foreign matter from without and the outgrowth of native matter from within. In the words *μεισημβρια*, *γαμβρος*, *ανδρος*; the Sp. *hombre* (= *homine*), *hembra* (= *femina*), *lumbre* (= *lumine*), *nombre* (= *nomine*); the Fr. *comble*, *sembler*, *nombre*, *tendre*, *tiendrai*, *gendre* = L. *gener*, and It. *tengo*; the *b*, *d*, and *g* are not intrusive, 'eingeschoben,' or 'eingeschaltet,' but natural extensions from the liquids which precede them. In the pronunciation of the three nasals *m*, *n*, *ng* (as in *sing*), as stated above, the passage of the air through its ordinary channel the mouth is closed respectively by the lips, or by the tongue pressed against the upper teeth, or lastly by the tongue pressed against the palate, while, the *velum palati* being thrown open for a time, the air finds a passage through the nose. But if this velum be all at once closed, and the passage through the mouth opened, then assuming that the 'cordae vocales' remain in the position requisite for articulation, the *m* passes into a *b*, the *n* into a *d*, and the *ng* into a *g*

(*bag*), so as to give us the combinations *mb*, *nd*, or *ng* (*anger*, or *εγγυς*). Not unlike the passage from *m* to *mb* is that from *m* to *mp*, as in *hiemps*, *sumpsi*, *sumptus*, *sompnus*. But it is not merely from the nasals that such after-sounds are thrown out. Every consonant without exception is apt before it concludes to pass into a neighbouring consonant, as *p* into *pf*, *apple*, but G. *apfel*; *hop*, G. *hopf-en*; *penny*, G. *pfennig*; as *r* into *rn*, *far*, G. *fern-er*.

But it is to the dentals especially that the outgrowing consonants belong, and this probably because they lie half way between, and so are neighbours at once to the gutturals and labials. Thus we find the combinations

Ct in *κτεινω*, *κταομαι* (cf. *παομαι*), *νκτ-ος*, *noct-is*, *ικτερος* (cf. *iecur*), *γαλακτ-ος*, *lact-is*, *plecto*, *pecto*, *necto*, *flecto*.

Ft. This, especially in English, as *aft*, *after* (see my fifth Essay), *left* (cf. *lacuus*), *sift* (cf. *sieie*), *gift* (*give*), *often*, *tuft* (Fr. *touffe*, Scotch *tuff*), *laught-er*. Add the German *sajt* = E. *sap*, *freundschaft*, &c.; and *hüfte* = E. *hip*.

Ht (*cht*, *ght*), as, A. S. *liht*, *miht*, *niht*; G. *licht*, *macht*, *nacht*; E. *light*, *might*, *night*; G. *specht*, *fechten*, *gelächt-er*; and *acht-en*, *veracht-en*, the analogues of *οπτομαι* *ὑπεροπτομαι*.

Lt. *βελτ-ιον*, *βελτ-ιστο-*, *βελτ-ερο-*, *ποлт-ος*, *pult-is*, *alt-ero-*, *ult-ro*, etc., *mult-us* (*πολ-υς*); E. *salt*, *pelt-ry*, *poult-ry*, *milt*, *melt*; G. *falte*.

Nt. *βεντ-ιστο-*, *λεοντ-ος*, *vent-us*, *vent-er* (cf. *γαστ-ερ-*, *womb*), *int-ra*, etc., *cont-ra*, *unquent-um*, *tegument-um*, etc., *scribent-i-* (see below); Fr. *loint-ain*; G. *ent-zwei*, *ent-gegen*, *ent-weder*, *ent-lang*; E. *tyrant*, *ancient* (as = Fr. *ancien*, and as = *ensign*).

Pt. *πτολεμο-*, *πτολι-*, *πτω*, etc., *τυπτ-ω*, *θαπτ-ω*, etc., *ὑπτ-ιος*, *subt-er*.

Rt. *fert-ili-*, *cort-ec-* (cf. *cor-ium*); *part-i-*, *sort-i-*, *art-i-*, *mort-i-*, in all which the full suffix is *ic* (*partic-ula*); G. *juchert* or *juchart* = L. *iuger*; E. *heart* = *cor* = *καρ*; *braggart*.

St. *οστ-εον* (cf. *os ossis*); *στοματ-* for *οστ-ου-ατ-*, and so akin to *ost-ium* and *os oris*; *Λιγυστ-ικο-*, *Λιβυστ-ικο-*, *Λιβυστ-ιδ-*; *crast-ino-*, *prist-ino-*, *rust-ico*; *post*, *post-ero-*, etc.; *ext-ra*, *ext-umo-*, etc.; *magist-ero-*, *minist-ero-*, *caelest-i-*, *agrest-i-*, etc.; *domest-ico-*, *modest-o-*, *arbut-um*, *tonst-r-ix*, *impulst-r-ix*, *persuastrix*, etc., from *tonsor* etc.;

⁶⁴
~~est~~-is; Fr. *être* (*estre*, cf. Ital. *essere*); G. *palast*, *morast*, *axt*, *einst* (prov. E. *oncet*), *obst* for *opaz*; the Old Norse reflectives, *kalla-st*, etc.; the E. second persons, *lov-est*, etc.; Germ. *bürste*, by the side of the Fr. *brosse*. I had at one time assumed that the Scotch surname *Johnston* was a variety of our *Johnson*; but it comes from ^{Pertle}*Inverness*, which once had the name of *Johns-ton*, i. e. *John's Town*.

I next take *d* as an excrescent letter, as in the form

Bd. *Μολυβδο-*, a variety of *μολυβο-*, comes from a verb *μολ*, as seen in *mol-ere*, and virtually in *μαλ-ασσ-ειν*, 'to beat soft,' as expressive of its marked malleability. The *d* is not heard in *plumbum*; and here I may note the Latin habit of giving to metals a neuter gender, whereas the Greeks make them masculine. Add, *βδεννμαι*, *βδελυσσω*, *βδελυρο-*, *αναρρουβδεω*, *ραβδος*, *εβδομος*, *κρυβδα*.

Gd. *απομαγδαλια*, and perhaps *μγδα*. As *Γημητηρ* passed into *Δημητηρ*, it was probably through a form *Γδημητηρ*. I do not add *ογδοος*, because the *δ*, as also the *τ* of *οκτω*, is probably radical. (See below.)

Ld. *αλδαινω*, *αλδησκω*, akin to *alo*; *Φελδομαι* (proved to have had a digamma by the forms *εελδομαι* and *επιελδομαι*), akin to *βουλομαι* and *uolo*. Fr., *moudre*, *resoudre*, *poudre*, *voudrai*, *coudre*, in old French written with an *l* before the *d*, and growing out of the Latin *molere*, *resoluere*, *puluere*, *uolo*, and *colurus* for *corulus*; Dutch *helder* = G. *heller*; Old Eng., *alderfirst*, as well as *allerfirst*, corresponding to the G. *allerbest*.

Nd. *ανδρος*, *Αλεξανδρος*, *ενδ-ον*, *ενδ-ος*; *ind-igeo*, *ind-e* 'down,' *ind-e* and *und-e*, from the original nasal-ending root of *is* and *quis* (see below), *scribend-um*, etc., *tend-o*, *mand-o*, *prehend-o*; Fr. *centre*, *tendre*, *Vendredi*, *viendrai*, *gendre*; G. *niemand*, *abend*, *and-er*, *mind-er*; E. *yond*, *yond-er*, *mind*, *sound*, *thund-er*; and *find*, *mind*, *bind*, as opposed to the Dorsetshire *fin*, *mín*, *bín*.

Rd. *καρδ-ια*, *cord-is* by the side of *καρ* and *cor*; *ord-o* 'a trench,' by the side of *ar-o* and *ορ-υσσ-ω* (cf. *ορχος* for *ορυχ-ος*), *mord-eo* by the side of *mol-o* 'crush,' *obsordesco* and *sordes* by the side of *obsolesco* and *solum*, *arduus* from *alo* 'raise,' Fr. *tord-re* by the side of *tero* and *tor-queo* *ter-si*; *Dordogne* from *Duranius*; E. *gird*, *burd-en*, *murd-er*, *haggard* (G. *hayer*), and probably the terms of

reproach, *drunkard*, *stinkard*, *sluggard*, etc. But we must here be on our guard, for in *beard*, *gourd*, *word*, *hard*, the *d* seems to be rather the remnant of a suffix, corresponding to the *b* in *barba*, *cucurbita*, *verbum*, *robur* for *er-ob-ur* or *or-ob-ur* (cf. ῥωννυμι ἐρρωμενος).

Θ occurs frequently in Greek as an excrescent consonant. Thus we have—

Λ' Μθ. Μαλθασσω = μαλασσω, μαλθακος = μαλακος.

Νθ. Φελμυθ- = ^{ver}men, akin to ^{ver}mis; πενθ-ες-, βενθ-ες-, ενθ-εν = *ind-e*, ανθ-ος from old verb = S. *an* 'blow,' whence αν-εμος (cf. *flos*, from *flare*), μυνθ-ανω, πυνθ-ανομαι.

Ρθ. ορθ-ρος 'dawn,' and ορθ-ος, δαρθ-ανω, πορθ-μο-, αρθ-ρο-, αρθ-μο-, σκαρθ-μο-, τερθ-ρο-, ενερθ-εν (see below); E. *murth-er*, *forth*, *farth-er*.

Σθ. εσθλο-, for Dor. εσλο-; Φεσθ-ητ-; εσθ-ιω, μασθ-αλιδ-, ισθ-μο-, ιμασθ-λη, ασθ-μα-, from αν- blow, σθεν-εσ-, αισθ-ανομαι; τυπτομεσθα; and the second persons ησθα εφησθα, etc. If the θ of μισθος be excrescent, we come to a root μισ-, one with *mer* of *mereo*, so that μισθωτος and *mercenarius* are one in origin as well as one in meaning.

Φθ. φβεγγω, φβεις, φθινω, φθανω, φθονος, compared with πολις, etc. Add ελευθερο-, as probably pronounced ελεφθερο-, and so = *liber*.

Χθ. διχθα, τριχθα, ροχθο-, ορεχθεω, and possibly ιχθυ- and εχθ-ρο-. S is probably excrescent in

ns of *ans-er*, G. *gäns-erich* (cf. the excrescent *d* of *gand-er*); *mans-io*, *ascens-u*, *mens-or*, *cens-or*, *tons-or*, *mens-is*.

Z as an excrescent consonant is common in German, and perhaps found nowhere else. It occurs in the combinations

Rz, Lz, Tz, as in *herz*, *kurz*, *schmerz*; *salz*, *malz*; *katze*, *ratze*, *hitze*.

In some of the examples here given I shall be found to have run counter to the usual doctrine. In μυνθ-ανω, for example, and πυνθ-ανομαι, it is commonly held that the ν is an epenthetic letter, seeing that the aorists are εμαθον and επνθομην. But I adhere to what I have said; and further hold that the π of λιμπανω and *rumpo*, the β of λαμβανω and *lambo*, the δ of ανδανω

and *tundo*, the second γ of $\tau\epsilon\gamma\gamma\omega$ and the g of *iungo*, are all ex-crescent, while the preceding nasal either is or represents the final consonant of the stem. In the case of *iungo* I am the more led to regard the syllable *iun* as a true theme, because the S. gives us *yunágmi* 'ich verbinde,' *yunákti* 'iungit.' Bopp indeed (vol. i. p. 218) finds a somewhat strange solution of the difficulty, in that he holds the *na* to be an insertion into the body of the root *yug*; and treats in a similar way *bínádmí* 'ich spalte.' A more violent use of the doctrine of epenthesis is I think not to be found. At the same time I readily admit that *yug*, as a genuine form of the root, has much to plead in its behalf, backed as it is by the Latin *iugum*, the Greek $\xi\epsilon\gamma\gamma\upsilon\mu\iota$, the G. *joch*, and E. *yoke*. On the other hand however, we have the Fr. *joindre* and E. *join*. But the two forms after all are not irreconcilable, for the dental nasal *n* may easily pass into the guttural nasal (*ng* of *sing*), and then into a mute guttural. So too, if I claim *fin* of *findo* and *bín* of *bínádmí* as the root, the passage of an *n* to a *d* is of the commonest. For example, $\beta\alpha\nu$ of $\beta\alpha\nu\omega$ and v^ad of v^ado are really analogues of each other, as I have had repeated occasion to say; and in the kindred words, G. *wand-eln*, *wand-ern*, as well as the Ital. *andare*, we have both the consonants, while the Neapolitan dialect gives a preference to *anare*. But where the choice lies between two forms of a root, one of which ends in a liquid, the other in a mute, I am inclined to give a preference to the former, if only because many languages, especially the Chinese, and I may even say the Greek and the French, exhibit an aversion to a mute-ending word; and indeed in the case before us, $\beta\alpha\nu$ -, v^ad -, I find my choice confirmed by the derived *amb-ulare*. A similar disputed claim lies between *lingere* 'to lick,' backed by *lingua*, E. 'lick,' and indirectly by $\gamma\lambda\omega\sigma\sigma\alpha$ on the one hand, and *lambere* with *labium* and our *lip* on the other. In the case of $\mu\alpha\nu\theta\alpha\nu\omega$, to the support of $\epsilon\mu\alpha\theta\omega$ is opposed that of $\mu\epsilon\nu\omega$, Lat. *mens* and *memini*, and our own *mind*, although *mood* and *moody* have only a mute. The verb *tundo* by its perfect *tutudi* seems to claim for its root a single *d*; but the participle *tunsus* speaks in favour of an *n*. But here we may also call as witnesses the Greek $\tau\upsilon\pi\tau\omega$ and $\tau\upsilon\mu\pi\alpha\nu\omega$ and the E.

thump, so that a final decision must be given in favour of a nasal-ending stem, *tun* or *tum*, the *m* of the latter easily passing into a *b* or *p*.

The treatment of the combinations *mb*, *nd*, *ng*, as having their more essential part in the liquids, which of course are readily interchangeable, accounts for the numerous cases where what are substantially the same words take sometimes the one form, sometimes the other. Thus, to repeat in part what has been just said, we have *andare*, *wandeln*, *wandern*, *ambulare*, and our *gang*; *sanguis* or *sanguen*, and the Sard *sambene*; G. *lende*, and L. *lumbi*; *lingo*, *lingua* (Fr. *langue*), and *lambo*, with Sard *limba* = *lingua*; *iungo* and *joindre*; *tingo* and *teindre*, etc.; *ἄνθρωπος* and Sp. *hombre*; Fr. *gendre* and *γαμβρος*; Sp. *hambre* (cf. L. *fames*, whence in Low L. *famina* and our *famine*) and *hunger*; It. *tengo* (= *teneo*), L. *tendo*. Akin to these changes is what is seen in L. *vent-er*, E. *womb*, Sc. *wemb*; L. *quinque*, Sard *quimbe*; Ital. *cambiare*, Fr. *changer*; *Andecavi*, *Angers* and *Anjou*.

I have stated my strong belief that in such words as *noct-is*, *part-is*, *pult-is*, *ment-is*, etc., the *t* is excrecent; and if this be true, then it is wrong to say that the nominatives *nox*, *pars*, *puls*, *mens*, are compressed from fuller forms, *noctis*, *parts*, etc. Nor is this at variance with the doctrine that there existed at one time nominatives such as *parti-s*, whence the acc. *partim* and the vb. *partior*; for *parti* as a theme stands for *part-ic-* (*partic-ula*); and so is a diminutive of the simpler *par-*, whence *pars*. *Mers* is now established as a legitimate Latin word by the side of *merx*; but it is not a contracted variety of *merx*, for here again we have a simple stem, *mer-*, the analogue of our *ware*; and a diminutive *merc-* = *mer-ec-*, corresponding to our *work* and the Gr. *ἔργον*.

Another important advantage that results from the doctrine of excrecent consonants is that it serves to explain the passage of labials and gutturals to dentals. The noun *πολεμος* we know for some Greeks passed into the form *πτολεμος*; and hence the name so familiar for the Greek sovereigns of Egypt, *Πτολεμαίος*. This name an Englishman commonly pronounces as though the initial consonant were not there. In Italy and Spain, what is not pronounced is not written, as *Tolommeo* and *Tolomeo*. Nay, already

in ancient times the same economy of writing was at times observed, as Tolomaidi Inscr. Nap. 3395 (at Puteoli), Tolomea, Fabrett. 9, 438. (See Schuchardt's 'Vulgär-Latein,' 2, 246).

Again, the passage from *μολυβος* to our decapitated *lead* is explained as regards the *β* and *d* by the intermediate *μολυβδος*. The Greek *ῥαβδος* I am disposed to regard as shortened from a form *ῥαρ-αβδος*, itself a variety of *ῥαραβ-ος*, from *ῥαρασσω* (cf. *θορυβος*, as well as *παραχη* from *παρασσω*); and this I look upon as represented in the Latin vocabulary, so far as the first two syllables are concerned, by *uerber* for *uerb-er*. But *ῥαβδος* drops its labial in the Latin *radius*, E. *rod*.

The passage in this way from a guttural to a dental is of the most frequent occurrence. The adverb *sētius* it seems impossible to separate from the forms *sēcus* and *sēquius* of like meaning; and all difficulty both as to the consonant and the quantity vanishes, if we regard the first as standing for *sectius*. *Otium* (like *negotium*) was undoubtedly written with a *t* rather than a *c*; and again I confidently refer it to the verb *uocare* 'to be disengaged,' now so well established as the older form of *uacare*. The quantity of the vowel no longer constitutes a difficulty, if we regard it as representing a theoretic *uoct-ium*. *Πλεκω* must be one with our verb *plat*, and the intermediate link is seen in *plecto*. The Lat. *luc* appears as *luit* in French, owing to the variety heard in *lact-is*, *γαλακτ-ος*. ~~*Nec* seems to have been the oldest form of the Latin negative, as in *nec mancipi*; while we have a dental in *not*, but Chaucer's form was *noek t*, as the German is still *nicht*. See~~ other examples of the series *c*, *ct*, *t*, in the Essays, pp. 208-9.

G also yields its place at times to a *d* in the same way. Thus we find in Latin a series of nouns in *ag-on*, *ig-on*, *ug-on*, and another set ending in *ed-on*, *id-on*, *ud-on*. The former correspond in character, and as regards the consonants also in sound, with our familiar suffix *ick-in* (*mannikin*), the G. *ich-en* (*veil'chen*), and the Gaelic *eur-ach-an* 'a coracle;' so that I feel urged to give to the *g* a preference over the *d*; and accordingly I find *robi-go* already in Plautus, but *rubedo* not before Firmicus; *albugo* in Pliny, but *albedo* first in Cassiodorus. In some of the words which seem to give a general preference to the *d*, a reason perhaps

is found in the possession of a previous guttural, as *grau-edon-*, *dulced-on-*; and even in the large family in *it-udon*, as *multit-udon-*, the earlier form was probably *multic-udon-*; but this is a point to be discussed under the head of adjectives.

The verbs *rugio* and *rudo*, among other uses being applied alike to the lion, are in all probability substantially one; and if so, I would give priority to the former, partly for the reasons just given, and partly because the kindred vbb. *βρυχ-ω* and our own *bellow* and *bark* all point to a guttural. Thus *rud-* would seem to have grown out of *rugd*. Persius makes the *u* of *rudo* long. So *rādo*, compared with our *rake*, suggests a form *ragdo*; and this *g* on consideration would be found to derive support from other allied words. I have already stated that *Γημητηρ* probably passed through a variety *Γδμητηρ*, on its way to *Δμητηρ*. The early silence of a *g* in such a combination is seen in the name *Magdalen*, as commonly pronounced alike at Oxford and Cambridge, and in *Lugdunum* (Batauorum), now *Leyden*.*

* See also for other examples the Essay on 'Excrecent Consonants.'

CHAPTER IX.

DECAPITATED WORDS.

So far, in the consideration of the Grammatical Figures, we have been dealing with what has no basis, or next to no basis, in reality, as 'epenthesis' and 'paragoge,' or with that which to a small modicum of truth has appended a large mass of error, as 'prosthesis' and 'metathesis.' I now proceed to the figures which speak of abbreviating words, and these characterise the changes in all languages. Among these 'aphaeresis,' or 'decapitation,' plays perhaps the most important part, and has not I think met with the attention it deserves. We are familiar enough with the instances of 'pistil in Chaucer, 'poteary, 'dropsy, 'liquorice, 'boutique, 'bus, and 'van. A class of words in which this habit has played an active and unmistakable part is seen in proper names so maltreated, as *Sebastian* cut down to *Bastian*, *Nicole* to *Cole*, *Elizabeth* to *Bet*, etc., *Alexander* to *Sandy*, thus leading to the patronymic forms *Saunders* and *Saunderson*. But I would rather deal with whole classes of decapitated words, and the class which from its extent claims our first attention is that which appears in the formation of secondary words, especially verbs, followed by aphaeresis. I take as an example, to head and serve as a memorial of the list, the three verbs, *bell* (G. *bellen*), *bellow*, *low*.

It will generally be found that such decapitated words commence with a liquid, esp. *r*, *l*, *n*, and this with reason, because such absolute decapitation is commonly preceded by forms which commence with two consonants, the original initial consonant being for a time preserved. Thus in the instance quoted, *low*

was probably preceded by a now lost *b'low*. Indeed it is especially in the neighbourhood of a liquid that the vowel is apt to disappear, and this as a matter of course, as of two initial consonants the second is most frequently a liquid.

The problem however, "Given the decapitated to ascend to the fuller form," seems to be beyond solution; but the difficulty is to a great extent removed by faith in the doctrine of assimilated vowels, in other words, by the assumption that the vowel of the lost syllable is one with, or at least akin to, the vowel in the given form. Then again, as to the lost initial consonant, if there was one, it will commonly be found to have been a G, an S, or a digamma, perhaps a B.

a. I take first those words which have an initial R: as,

Ῥεζω with *εργον* or rather *Ῥεργον* beside it, one with our *work*, and so exhibiting only the root-syllable in our *ware*.

Ῥαπτω (*ῥαφ*-) a verb identical in meaning with L. *sarcio*, whose part. *sartus* points to a simple stem *sar*. Hence *ῥαφ* has superseded a form *σαρ-αφ*, with a suffix identical with that of γ(*a*)ρ-αφω. Σαρ- perh. = L. *su-* and *ser-* of *sero*, 'sewing' and 'sowing,' similar in action, both leading to a 'series.'

Ῥοφεω, one in meaning and no doubt in form, with *sorbeo*, part. *sorptus*. Hence it represents a lost *σorp-οφ-εω*. Is *σorp-* = L. *sug-*?

Ῥηγνυμι = *frango* and E. *break*. But these are themselves secondary verbs, the stem of which is more clearly seen in *for-are* and *bore*. Nor let the apparent difference of meaning stand in the way, for the E. phrase *break of day* and the G. *der Tag bricht an* imply piercing as much as the Fr. *point du jour*. Compare too the noun *breach*, 'to broach a cask,' and a lady's *brooch*. Thus *frag* of *frango* = *for-a(g)* of *forare*. Again *for* of *forare* appears with a *d* in place of *r* in *fod-ere* (cf. *audio auris*, and our *bod-kin* by the side of *bore*).

Ῥιπτω (*ῥιφ*-) by the side of the G. *werfen* suggests a fuller *Ῥεπ-ιπτω*, from a root = *uer* of *uerto*, so that we seem here to have a reference to that circular motion which precedes hurling, as with the sling or lasso. Cf. *torqueo* and indeed *hurl* itself. Note too the Lith. verb *krypti*, 'sich wenden;' as also the mod. Gr. *ῥιχρω*, the χ of which is older perhaps than the φ of the classical Greek.

ῥέω ῥέεσθαι, one with *fluo* (*fluctus*); but here again we have a compressed word, standing probably for *fol-uc-*, the stem of which is virtually seen in *fundo* (*fud*), *l*, *n* and *d* so often interchanging.

ῥέπω seems to stand for ῥέρ-επω, if we may claim it as akin to *L. uer(e)go* of like power.

ῥωννυμι with its part. ἐρρωμενος 'hardened,' or as an adj. 'hardy,' I am strongly inclined to connect with *καρ* the base of *κρατος* *κρατερος*, and so with our *hard* *hardy*, as well as with the *L. robur*. For interchange of *b* and *d* in the neighbourhood of an *r*, cf. *barba* 'beard,' *uerbum* 'word,' *uerber* ῥαβδος *radius*.

ῥῆμα referred with reason to the Homeric verb εἶρω 'say,' with its future ῥέω. But here we have two consonants putting forward a well supported claim on the evidence of the *L. sermo* and *serere sermones*, and again *uerbum*. Precisely the same difficulty arises with the *L. uelum* (for *ueglum*) and the *G. segel*, *E. sail*, which must be varieties of the same word.

ῥαξ. See above, p. 66.

Răpio by the side of ἄρπ-αζω, *orbis*, *ορφανος*, *Sp. huerfano*, points to an older secondary verb ῥαρ-απ-.

Rēpo, ἔρπω and *serpo*, *S. sarp*, all identical in meaning, have in the suffix *ep* or *p*, that same diminutival suffix which is seen in *carpo* 'eat little by little, nibble' (cf. *κείρω*, *caro carnis*). In the *S. sar* or *sri* 'go' we have the simple verb.

Reor ratus. We have here a verb identical with *E. reck* and its secondary *reck-on*, so that counting is the primary sense, as is also the case with the *Lat. ratio*. The Greek ἀριθμος (standing probably for ἀριχμος) supplies the lost vowel, and the *W. careg* 'stone,' one with *L. calc-* (*calc-ulus*), gives us the consonant. The connection of the ideas is palpable. Again, now that *rātus* may well be the participle of the simple verb *car*, rather than of (*ca*)*reor*, we have an explanation of its short penult and vowel *a*.

Ringor 'snarl' stands by the side of *hirrio*, of which *hir* is evidently mimetic, for evidence of which we need not go further than to the line of *Lucilius*:

"Inritata canes quod homó-quam planius dicit."

Remus, older *resmus*, and ῥε-εσσ-ω have their probable origin in *uel* of *uello* 'pull.'

Rāna. Starting from *βαπαχος* I see in the τ before ρ what is likely to vanish, as in *patricida*, *nutrire*, reduced to *parriciaa*, *nourrir*; and then by an easy contraction we pass from *βαπαχος* to *βπαχος*, so like our *frog*; again from a dim. *βπαχ-iva* would come a L. (*g*)*rāna*, and through a theoretic (*g*)*ran-ucula* the Prov. *granolla*, Fr. *grenouille*.

Rādo, when contrasted with E. *rake*, and Gr. *χαρασσω*, etc., suggests an older *ragdo*, with an excrescent *d*.

Rōdo in like manner probably grew out of a fuller *rogdo*, and so is virtually one with the Gr. *τρωγω* of precisely the same meaning. This *τρωγω* I am inclined to treat as representing a trisyllabic *κορ-ωγω*, and so akin to the L. *carpo* 'nibble,' to *caro* and *corpus* 'flesh,' perhaps also to *κειρω*, the interchange of consonants immediately followed by *r* or *l* being of common occurrence. Thus the L. *tremo* stands for a lost *cremo* akin to the reduplicate *καρκαυω*, to adj. *querquera* (*febris*) used of the ague, to old Fr. *cremir* and mod. Fr. *craindre*. So again *τερχ-ω* may well be of the same stock with L. *curro*, whence *curric-ulum*.

Ruo must surely be one with the Gr. *ερω* 'drag'; but this is for *φερω* (Kidd's ed. of Dawes's 'Miscellanea,' p. 267). But *ελκω* also must be of the same family, and so too *uello*. The familiar combination *trahere ruinam* shows the connection of ideas. Lastly we now see why a short penult prevails in the participles *dirūtus*, etc. Cf. *reor rātus*, *lino litus* (pp. ¹²¹132, ¹²³134).

Res for *er-es* from *esse*. Cf. for form of root *eram ero*, for suffix *fid-es*, *speci-es*, *faci-es*; for meaning *re* as opposed to *ucrbo*, also *re-apse*, E. *re-al*; and the Greek words *ετ-εος ετ-υμος*, which find their best explanation as derived from *ειμι* (*εσ-μι*).

Rupes I hold to be one with *arx*, and so again one with W. *careg*, E. *crag*, *rock*, etc.

Rum-ex 'sorrel' may well have been cut down from a lost *sor-um-ex*, of which *sor-um* again may be one with the form *sour-ock* (see p. 68).

Ruber and *rota* have been dealt with in p. 89 and p. 9.

Run E. is represented by *yrn-an* in A.-Sax., by *hirn* in Dorsetshire, so that it contains a suffix in what follows the *r*. The root then is one with *cur* of *curro*.

Row I make one with the Gr. *op-(v)χ-os*, and so in root one with L. *ord-on-*, the term being of agricultural origin, viz. a vine trench, with its row of plants. Cf. Horace's

“ Est ut uiro uir latius ordinet
Arbusta sulcis.”

Rake, the same word in origin with our *harrow*. See *rādo* above as deduced from a theoretic *ragdo*.

Roll, a shortened form from *hurl*, and that from *whirl*. Compare the Scotch use of *hurl-barrow* for *wheelbarrow*.

Reed and *rush*, by the side of the L. *arundo* and *carex*, Dorset *hursch*. *Red* too in the S.-West of England has a more legitimate form, viz. *herd*. In the case of *horse* England has the advantage over the G. *ross*.

Rope and *ring* have been spoken of before.

b. Decapitated words in L.

Λαας and L. *lapis*. Cf. L. *calx* ‘stone,’ Gael. *clach* ‘a stone,’ etc.

Λαξ, λακτιζω. Cf. L. *calx* and E. *heel*.

Λιπ-α, L. *lino*, S. *limp-âmi*. We have already evidence of some preceding vowel in αλειφω, ελαιον, *oleum*, *oliua*, and perh. of an initial *w* in Fr. *huile*. The L. *adepts* belongs to the stock, for Probus admits the existence of the variety *alipes*, when he condemns it. Moreover if *lino* stands for *el-ino*, the short penult of (*e*)*litus* is explained, for it corresponds precisely to *pos-itus* from *pōno*, i.e. *pōs-în-o*.

Λουω ‘wash,’ L. *lau-o*, has so much that is common in meaning with πλυν-ω ‘wash’ that they can scarcely be separated; and this tempts me to the idea that the L. *pluo* and *pluvia* may be related to them. The root-syllable then was perhaps *pol*.

Λεγω, L. *loquor*, S. *lap*. It is commonly assumed that ‘to speak’ is the primary meaning of these words; but when one’s thoughts are directed upon such phrases as λογον διδοναι, λογον αιτειν, and on the terms λογιζομαι ‘count, reckon,’ λογιστης, etc., it is difficult to keep out of view our own word ‘tell,’ which, in spite of its limited use in modern times, had no doubt for its earlier sense what we find in Milton’s “Every shepherd *tells* his tale,” in the term *tellers* as used in divisions of the House of

Commons, and so on. The G. *zahl* speaks in the same sense. On this assumption I am led to ask whether λεγω may not stand for καλ-εγ-ω (corresponding to the Lith. *kalp-u*), and so be allied to L. *calx*, *calculus*, etc.? This would make the Gr. λογος and L. *ratio* of the same origin, and in meaning assuredly they have much in common.

Λεπω 'peel' has precisely the meaning, and I may say the peculiar meaning, of the L. *glubo*, which I have long held to be a compressed form of an old *col-ub-o* and so akin to *col-or*, which means 'skin' rather than 'colour,' and so has the same successive senses as χρωσ (for κολωσ?). Further, what is now left as the root, viz. *col-*, has its legitimate analogue in the E. vb. 'hull.'

Ληις -ιδος has two meanings: 'booty, spoil' (usu. of cattle), and (without any notion of plunder) 'a herd or flock.' Now this double meaning is just what belongs to the W. *praidl*, which must be one with, not however borrowed from, the L. *praeda*. As the interchange of *l* and *r* is of the commonest, esp. in a second consonant, we may safely infer that ληις has supplanted an older πληις.

Λοφος 'back of the neck,' esp. of draught-cattle, because the yoke rests upon it. Now the L. *collum* also has properly the same limited meaning, and is the word commonly used in the same connection; and further the Gr. κολλοψ is translated as 'the thick skin on the upper part of the neck of oxen.' Some such form as κολλ-οχ ought to have represented the L. *collum*, but the repetition of the guttural might well be avoided by the substitution of the labial π as in κολλοψ, or by the labial φ as in the theoretic (κο)λοφος. *Collum* is of course one with *callum*.

Λυγος 'a willow twig.' Can this be other than (σο)λυγος, corresponding to our 'sallow,' or (φο)λυγος = our 'willow'?

Λυκος, generally admitted to be one with our 'wolf,' in other words a corruption from φολυκος or possibly γολυκος, the root γυλ having been preserved, according to Fox Talbot's reasonable theory, in the proper name Γυλιππος, and in A.-S. *geolu*, Sc. *gool*, and virtually in our *yell-ow*. The Gr. αλωπ-εκ- 'the little wolf,' i.e. 'fox,' still preserved an initial vowel.

Lūceo, lux. Our own *glow* already gives us a consonant; and the W. *gol-eu* 'light,' supplies the very vowel which theory would have led us to.

Lūbet. Here *uolupe* and its derivative *uoluptas* supply all that we need ask for.

Luo 'loosen' is one in meaning with the fuller *sol-uo*; and similarly, to the L. *laxus* corresponds pretty closely the E. 'slack.'

Liber 'the bark of a tree' was probably in the olden time written as *lūber*, precisely as *libet*, the later form, superseded a *lubet*. This allowed, *luber* connects itself with *glubo* 'peel' and also with the Gr. λεπω.

Liber, as connected with ελευθερος and prob. one with *solubilis*, has been already discussed.

Lēpus and λαγως also in the same passage.

Laeuus has for its S. analogue *salaiva*, as I was informed by my late colleague, Dr. Goldstücker.

Lēgo 'take, choose' seems to claim kin with the Scotch *wale* 'choose,' G. *wähl-en*, etc.; and I think we have this verb virtually in αἴρω with its aorist εἶλον.

Lūgeo. Cf. ολολυζω, and οδυρομαι.

Lātus 'borne.' Of course for *tlatus* and so from *tol* of *tollo*. Cf. τητος, τολμη, ταλας.

Lātus 'broad.' Cf. πλατυς, as also *pando*, *palma*, *planus*.

Lāna, for *uellana*? from *uello*. Cf. *uellus*, E. *wool* and *flannel*.

Lābor. Cf. E. *slip* and E. *glide*.

Lābor I place alongside of the G. *arbeit*, Pol. *rabota*, of like meaning, and so ask myself whether an older form may not have been *arab-or*. This reminds me of the L. *arab-ilis*, and so brings me to a special form of labour, but that which takes precedence of all others in the first passage from the nomad life. Then again I call to mind that in French the very words *labourer*, *laboureur*, *labourage*, are exclusively used of agricultural labour; and so the W. *llafur* = 'labour, tillage, corn.' So too our verb *earn*, i.e. 'gain by labour,' seems to be a secondary form of the old vb. *ear* 'plough.' For the assumed

change of *r* with *l*, cf. *Alabarches* the Roman substitute for *Arabarches*.

Lac lactis. Cf. γαλα γαλακτος, and perhaps *milk*.

Lark. As Lat. *l* often represented an *r*, as in *caduceus*, *audio*, *fodio*, *ad*, *apud*; and as the Lat. *a*-nouns once ended in *c*, *alauda* = *alauerac*, = Scotch *laverock*, Lancash. *larrock* and *larrock*, = *lark*. Hence *al*- 'raise' is prob. the root, the name referring to the soaring habit of the bird.

Laugh, G. *lacheln*. Compare γελαω, the theme of which seems to have been γελαγ-, whence the Dor. fut. γελαξω, and the form of the adj. γελασ-ιμος is quite consistent with this theory. Even the sb. γελωσ-ωτος points I think to a crude form γελοκτ- corresponding to the G. (*ge*)lächt-er and E. *laughter*. The simple stem may possibly exist in the verb *yell*, as used in old Scotch writing of 'laughter,' with a derivative *yelloch-in*, lit. 'screaming.'

Leaf, ultimately connected with the L. *folium* and G. *blatt*, E. *blade*.

For *leap*, see p. 88; *lead*, p. 117; *low*, the vb., p. 130.

c. Decapitated words in *N*.

Ναπν, 'mustard,' with a fuller σινηπν, perh. from σινομαι 'hurt.'

Ναιω (νασσω?) 'cause to dwell in, settle' I would derive from εν 'in,' as = εν-ασσω. So too ναος 'dwelling, temple,' comparing O.N. *inni*, A.-S. *inn* 'domus,' A.-S. *innung* 'abode,' for our limitation of *inn* is modern. Again, νεμω, for ενεμω, of the same meaning, so that νεμεται as refl. = 'inhabit'; as pass. 'be inhabited.' At the first allotment then νεμω would mean 'distribute' (land); and then this would be generalized. For suffix εμ cf. βρ-εμω, τρ-εμω, δρ-εμω of εδραμον. I include νασσω 'put in,' then 'stuff.'

For νεος, see Essays, pp. 66, 72; νησσα, p. 71.

Nurus 'daughter-in-law' I believe to stand in the place of a lost *gnurus*, i. e., *gon-urus*, corresponding to *gener* 'a son-in-law,' much as *socrus* does to *socer*. *Gener* of course = γαμβρος, and so akin to γαμεω. That something has been lost before the *n* of *nurus* is proved by the S. *snuza*, A.-Sax. *snoru*, and old G. *schnur*. (See L. and S. voc. *nvos*.)

Necto, necesse, etc., on the evidence of *αναγκη*, have lost at least an initial vowel. Our *knit* pleads for a guttural in addition.

Nōta is akin to, but not deduced from, *nosco*. It comes rather from the simpler stem *gon* of *g(o)n-osco*, and so stands for *gonota* or *gnota*, with a suffix like that of *βιοτη*. Cf. *ovotaζω* ‘brand.’

Nosco, nascor, nitor, have been dealt with above. So also *nebula, nubes*. For *nuo νεω*, *nox νξ*, etc., see Essays (pp. 68, 69).

d. Decapitated words in *M*.

Mālus is a corruption of a lost *am-alus*, the suffix of which is also seen in *μεγ-αλη*, *ἀπ-αλος*, *ὄμ-αλος*, etc., and the root akin to the Gaelic *amh* ‘bad,’ and to the so-called negative prefix, in Gr. *av*, in Lat. *in*, in E. *un*, in Oscan and Umbrian *am*; a particle for which I have claimed the notion of ‘male’ in my sixth Essay; and to what is there said let me add the *Am-sancti ualles* of Virgil, with its ‘pestiferae fauces’ and temple to Mephitis. Hence the old Prov. Span. and Port. *av-ol* ‘bad’; akin to which are our own *ev-il*, G. *üb-el*.

Mālum ‘apple’ must have replaced an older *amālum*, as its W. analogue is *aval*, E. *apple*.

Mingo seems to have lost an initial vowel, as the Gr. is *ομιχω*.

Mēto, cf. *αμω*; *melior*, cf. *αμειων*; *μοι με*, cf. *εμοι εμε*.

To this head belong the forms which appear now with, now without an initial *α*, as *mulgeo αμελγω*; *μερδω* and *μεργω*, forms which grammarians place alongside of *αμερδω*, *αμεργω*. *Αμανρος* and *μανρος* are well authenticated examples; and here we have perhaps an explanation of the fuller variety, as coming from *αμ* (see *mālus*, above) = *male* and *δραω*.

Again the *σ* may be original in the pairs of words, *μαραγδος* *σμαραγδος*, *μαρασσω* *σμ.*, *μηρινξ* *σμ.*, *μικρος* *σμ.*, *μιλαξ* *σμ.*, *μογερος* *σμ.*, *μνξων* *σμ.*, *μνραινα* *σμ.*, *μνρρα* *σμνρρα*, *μαγελη* *σμ.*, *μωδιξ* *σμ.* But as regards the verbs I must hesitate, inasmuch as to them a preposition may have been prefixed, viz., *σνν*, cut down first to *σν*, and then to a mere *σ*. I say this after noticing that the Bohemian* vocabulary has a preposition *se* ‘with,’ often shortened to a mere *s*, both before nouns and as a prefix to verbs, as *hořeti* ‘brennen,’ *shořeti* ‘verbrennen’ (Dobrowsky, Gr. p. 139); and

* So too the old Slavic (Dobrowsky’s Inst. p. 408).

such employment of the preposition agrees with the use of its Latin representative *con* in *confugio*, *contundo*, as conveying intensity. Nay, we too have examples in keeping with this, as *smelt* (iron), but *melt* (butter), *smash* (a train), but *mash* (potatoes).

e. Decapitated words with other initial letters.

Κεινος with *εκεινος*, θελω with *εθελω*, στομα for *οστομα* (Essays, p. 213).

Ānas by the side of Fr. *cane*, see pp. 71, 137; *aper* *καπρος*; *anser* *χην*, G. *gans*, E. *goose*, *gander*, S. *hansa*; *amo* S. *kam*; *arx*, *calc-*, W. *careg*, E. *crag*, *rock*, cf. *Carrick-on-Suir*, C.-Fergus, see above; *aer* *αηρ*, *caerulus* and *caelum* 'air'; *aro* *χαρ-ασσω*, G. *gr-ab-en*; Ir. *athair* for *kathair* = *pater*; *ubi unde ut uter*, etc., for *cubi cunde cut*, etc. Cf. E. *what*, *which*, etc., for older *quchat*, *quwhilk*.

Sĭno and *sĕro* probably represent lost forms, *es-ĭno*, *es-ĕro* 'cause to be,' 'put,' which would account for the short penults of *sĭtus* and *sĕtus*. That the notion of 'putting' originally belonged to these words is shown for the first by *desino* 'put down' and the sb. *situs*, for the second by the verbs *desero* 'put down,' 'abandon,' *exsero* 'put out,' *insero* 'put in.' The syllables *in* and *er* being suffixes, form no part of the perf. ind. or perf. part. Cf. *pōno* (for *pōs-ino*), *posui*, *positus*.

For *per post* and *pomum*, as representing *super*, and lost forms, *op-os*, *op-om-um*, see Essays, pp. 109, 117, 147.

f. General Remarks.

The doubling of the liquids in Greek words, as *εραππον*, *εραφα*, *ελλιπεν*, *εμμαθεν*, *εννεον* (Buttmann, Gr. § 33, Anm. 3 and 4), as also in compound nouns, *λιθιρρινος*, seems to admit of its best explanation on the theory that the lost consonant was assimilated to the following liquid. So too *ταλανρινος* is treated as representing *ταλαρρινος*.

The initial diphthong of *ειληφα* *ειληχα* *ειρηκα* *ειμαρται*, followed in each by a liquid, seems to point to some contraction. In the case of *ειρηκα*, the loss of a *σ* is suggested by the L. *sermo* and the phrase *serere sermonem*; and a comparison of the aspirated *ειμαρται* with the aspirated *εσπομην* from a stem *σεπ* = *seq* of *sequor*, leads to the conjecture that an earlier form was *σεσεμαρται*, so that *μειρομαι* would stand for *σεμ-ειρομαι*, with a suffix like that of *εγ-ειρω*.

Again the temporal augment in *ηδυναμην ηβουλομην* seems to imply that the older forms of the verbs were *εδ-υναμαι, εβουλομαι*; cf. *θελω, εθελω*.

Of course the lengthening of a final short syllable in Homer before words beginning with a liquid supports what has been here said; and above all the fact that in several languages words with an initial *r* are unknown. Then in Greek such words have at least an aspirate; and the habit of representing these in another language, as *Rhodus* for *Ῥοδος*, though not to be defended in reason, has its parallel in our own *who, what, whole*, etc., where we should rather have written *hwo, hwa, etc.*, as indeed Elphinstone, in his translation of Martial, had the courage to do, and as was the habit of Anglo-Saxon, as in *hracca* 'back of the neck,' 'scrag'; *hræmn* 'raven,' *h'edp-an* 'run or leap,' *hlæne* 'lean,' *hnig-an* 'bow down' (cf. *νενω*), *hnecca* 'neck.' Schmidt again in his Grammar tells us (p. 10), "Die Mongolische Sprache hat kein einziges mit einem *r* anfangendes Wort." We also write indeed, but fail to utter, the initial consonants of *wring, wrist, know, knave*.

Throughout the argument of this chapter it should be observed that what has been suggested is supported by the fact that the assumed root syllable is followed, at any rate for the most part, by a well established suffix, as for instance in the series *bell* (as a bull), *bell-ow, l'ow*.

Still a counter-theory has been set up, viz. that the fuller words are in fact compounded with prepositions. It is true that we have a familiar prefix in the shape *be*, as in *be-smear, be-gin, be-reave*; but this prefix is I believe always unaccented, and so differs from our verb *béllow*. Further, I should like to hear what preposition is to be proposed for *σινηπυ* 'mustard,' *γαλα* 'milk,' *καλx* 'a stone.'

CHAPTER X.

CRASIS, SYNCOPÉ, AND SYNALOEPIE.

THE compression of the interior of a word, whether involving the loss of consonants or vowels or both, is common to all languages. Thus in Greek we have the succession of forms, *μαχέσσομαι*, *μαχέσομαι*, *μαχέομαι*, *μαχονμαι*. Again, *Mea domina* has passed through the series of changes, *Madonna*, *Madame*, *Madam*, *Maam*, *Mum*, and in one of Dickens's characters *Mim*; nay, is reduced to a mere nasal in the colloquial answer, *Yes-m*. Then *ελεημοσυνή*, already cut down from six to two syllables in the Fr. *aumône*, and A.-Sax. *ælmesse*, is still further reduced in E. *alms*, in which too the *l* is silent. And within the limits of our own language we have *forecastle*, *sacristan*, and *boatswain* brought down in speech, if not in writing, to *foxel*, *sexton*, *bosen*.

As the compression of vowels is for the most part treated with all correctness elsewhere, I propose to limit my remarks here to the consonants and liquids.

G. That a Latin *g* was sometimes silent seems to be implied in the words of Priscian, or whoever was the author of the 'De Accentibus' (2, 523, 11 K.): "hic nihil huius uigilis quod uidetur per syncopam proferri;" confirmed as this is by the Ital. *vegliare*, Fr. *veiller*, and E. *revel*. Thus in Ter. Eun. 2, 2, 47, we obtain what is musical for an English ear: "Ne súrsu[m] deor-su[m] (= jorsu[m]) cúrsites, neu[e] úsque ad lucem uígiles." The loss of a *g* in *mauolo* and *malo* for *mage-uolo*, and in *maior* for *magior*, is allowed on all hands; and hence when I find *magistratus* demanding some shortened pronunciation in Latin comedy, as Pl. Rud. 2, 5, 20, "Magistrátus siquis me hánc habere uíderit"

(add Truc. 4, 2, 48; Pers. 1, 2, 76; Amph. pr. 74; Cæcil. Ribb.; Ter. Eun. pr. 22), I hold that it is safer to treat it as a trisyllabic *maistratus*, backed as this is by the It. *maestrato*, Fr. *maître*, etc., than to follow Dr. Wagner's suggestion (Aul. pr. 50) that the *i* of *magistratus* was merely shortened. Those nouns which in the simpler form have a long vowel before an *l*, with diminutives in *-xillus*, *-a*, *-um*, have no doubt lost a guttural, as *talus*, *palus*, *ala*, *uelum*; and in fact it seems likely that three of these have affinity with *αστραγαλος*, *pango*, and the G. *segel*, E. *sail*.

D. An instance of a silent *d* is I believe to be found in the occasional monosyllabic pronunciation of *modo* in Latin comedy, as in Ter. Andr. 5, 3, 11, "Me miserum! Hem, módone id dénum sensi Pámphile?" And here, notwithstanding the dissent of Dr. Wagner (ib. p. 22), I find some confirmation in the fact, that *mo* was used as a short symbol for *modo* by the Romans (see Lachmann's index siglarum attached to his Gaius, with a reference to the grammarians Magno and Papias); and, secondly, that the compound *quomodo*, already a dactyl in Horace, has assumed in the Romance languages the forms, *como*, *come*, *comme*. *Quidem* is another particle for which I claim a silent *d*; and this not merely in the old drama, but to a considerable extent in the writers of the most approved period. First of all, enclitics like *modo* and *quidem* are in their nature liable to indistinct utterance; and in the present case we have the analogous case of *itidem* cut down to *item*, which at once suggests a shortened sound like *quem*, of which the final *m* counts for little; and by a happy accident the legal language had already the written form *quandoque* for *quandoquidem*, as in Liv. 9, 10, 9: "Quandoque hisce homines iniussu populi Romani . . . spoponderunt, ob eam rem . . ." So Cicero (Caecin. 54): "Actio est in auctorem praesentem his uerbis, Quandoque te in iure conspicio;" and again, in joking imitation of legal language (Verr. 2, 3, 187): "Quandoque tu nulla in turpitudine defuisti . . ." Again we are told that although *si* in itself is always long, although *quando* has often a long *o*, and always in *quandoque*, and although *equidem* grew out of *ego quidem*, and further although this very object of affixing *quidem* to other words is to throw an emphasis on

those words, yet for once it has the strange effect of changing a long syllable to a short one, so that according to the usual doctrine we have short vowels in *sīquidem*, *quandōquidem*, *ēquidem*. On the other hand, a monosyllabic pronunciation gives us *sī-qu'em*, *quandō-qu'em*, *ē-qu'em*. Then as a final *m* in Latin according to Quintilian 'obscuratur,' as in *quandoque* for *quandoquidem*, I would cut down *quidem* first to *quem* and then to *que*; and again if the *u* in such forms was silent, as it is in French, and must have been I think in *āqua*, *nēque*, *lōquor*, we come to a sound *ke*, i. e. all but one with the Gr. $\gamma\epsilon$, the very particle which in power represents *quidem*, so that *sī-quidem* as *sī-ke* = $\epsilon\iota-\gamma\epsilon$; and *equidem* as *ēgke* = $\epsilon\gamma\omega-\gamma\epsilon$. I have said that an abbreviated pronunciation of *quidem* is commonly demanded by the metres of Latin comedy, and few words are of more frequent occurrence. This is stated again and again by Bentley and others, who seem to be satisfied by making a pyrrhic of it, simply dropping the *m*; while Ritschl (proll. 140 and 143) and Bergk (see Wagner's Anl. pr. 31) with more courage make it a monosyllable. I may add that the text of Persius escapes a solecism without damage to his metre if in Sat. 1, 110 we read, "Litera. Per me quidem [not equidem] sint omnia protinus alba." It is true that in 5,45 *equidem* stands in connection with *dubites*; but here also we have a solecism which needs correction, viz. *non dubites* for *ne dubites*, so that I have little doubt that the poet wrote, "Non equidem hoc dubitem [or dubito] amborum foedere certo Consentire dies;" which gives a satisfactory meaning; and the hiatus in this part of the verse, with a break in the ideas, has nothing that should offend.* *Edepol* and *epol* are in substance the same word, the shorter form growing out of the longer by the sacrifice of the *d*; and in oaths such shortening was habitual. When such forms as *quādrūpēdem* (Plaut. As. 3, 3, 118), *quādrūpēdanti* (Capt. 4, 2, 34), *quādrūpūlator* (Pers. 1, 2, 18; add Stic. 3, 1, 4), *quādrūplicem* (Curc. 5, 2, 21), call for abbreviation in comic verse, it seems but reasonable to take a hint from the

* This argument was given by me in the 'Journal of Education' of the U. K. S., vol. ii. p. 259, in the autumn of 1831; and was subsequently adopted by Dr. Donaldson in his 'Varronianus.'

L. quartus, Fr. *carême* = *quadragesima*, *quarante* = *quadraginta*, our *four* from *fidvor*, and read the words as *carpedem*, *carpedanti*, *carpulator*, *carplicem*. I have already spoken of the loss of a *c* before *t*, in *uirtum* for *uirectum*, and in *uitor* for *nictor*. *Ritus* and *rite* are other examples, as also *sētius*. In accordance with what I say of *quādrūpēdem*, etc., so too, as regards *sācrūfīcus* and *sācrūfīco*, I would meet the demands of the comic metres (Plaut. *Most.* 1, 3, 84; *Epid.* 2, 1, 7; *Amph.* 4, 2, 14; *Stic.* 1, 3, 97; *Poen.* 1, 2, 3; and *Ter. Ph.* 4, 4, 21) by dropping the *c* and *u*, again following the analogy of the Fr. *serment* from *sacramentum*; and on the like ground I habitually read *lācrūma* in the same writers as *la'rma*.

T. In *parricida* for *patricida* we see already that change which led to the Fr. *père* from *pater*; and here again when *pater* appears in Latin comedy, as it sometimes does, to need a shortened pronunciation (*Most.* 2, 2, 35; *Trin.* 2, 1, 31; *Ter. Ph.* 4, 2, 11), it seems simpler to drop the *t* than to drop the *r*, as Dr. Wagner proposes (*Aul. pr.* 33). Of course *māter* and *frāter*, with their long penults, were better able for a time to resist such compression, so that Ritschl's contention (*Proll.* 155) has I think little weight.

B, P. As a *b* is proved to have been a part of the datival suffix by the preserved forms *sibi*, *tibi*, and what were in origin datives, *ibi*, *ubi*, *alibi*, we may safely assume that *musai* (aft. *musae*), *nauī*, *patri*, *gradui*, *rei*, have lost a *b*; and even in the o-declension the two forms *seruo* and *nulli* admit of no other explanation than that the older forms ended in *oi*, so that here too the *i* has superseded a form *bi*. In the pl. the *b* has been preserved in most declensions; while even in the first and second we find *equabus*, etc., *duobus*, and *ambobus*. But all question is set at rest when we have before us co-existing forms, *quis* and *quibus*, *aliquis* and *aliquibus*. From *asporto*, *ostendo*, *sustollo*, etc., a *b*, or perhaps a *p*, has clearly vanished. Already in the reign of Theodosius^{1, 11, 2, 2} we find the point reached at which the French verb forms its futures by adding a corrupted present of *habeo* to an infinitive. Hence we may have the less scruple to accept a monosyllabic pronunciation of *habent*, like the Fr. *ont*; of *habes*, like Fr. *as*, as in Pl. Ps. 1, 2, 28, "Tibi

praecipio, ut níteant aedes : hábes quod facias : própéra, abi intro ;” Trin. 4, 2, 122, “ Vél trecentis. Háben tu id aurum quod ácepesti a Charmide ?” ; Ter. Eun. 2, 3, 93, “ Habent déspicatan et quáe nos semper ómnibus cruciánt modis.” Some would make *habent* here a pyrrhic. When oblique cases of *duplex* occur in Plautus or Terence, I am inclined to give them a compressed utterance, dropping the middle vowel, and at the same time the *p*. Compare what was said of *lacruma*, etc.

M. *Tam*, as used for *tamen*, is especially mentioned by Festus (p. 360, b. 5), with examples from Ennius and Titinius, which Corssen would set aside as without value, but which to me seem trustworthy, especially as *tamen* is assuredly often contracted in some way (Plaut. Glor. 4, 8, 45 ; Stic. 5, 3, 6 ; Pseud. 4, 17, 86 ; Pers. 1, 3, 39 ; 3, 1, 34 ; and Ter. Eun. 5, 2, 50 ; Hec. 5, 4, 34 ; Ad. 1, 2, 65). But it is enough to look at *tandem*, which by its meaning must come from *tamen-dem*. Whether *tam-etsi* or *tamet-si* be the right division may be disputed. Umpfenbach indeed always writes *tam etsi*, so that *tam* may suffer elision. I am inclined to prefer the division which treats *tamet* as the first element, as I hold *ta-men* itself to represent an older *ta-met* ‘with (all) this,’ ‘withal,’ the *met* = *μετα* and Germ. *mit*. But even then *tametsi* itself is habitually a disyllabic word = *ta’tsi*. (Pl. Glor. 3, 1, 149 ; Ps. 1, 5, 56 ; Stic. 1, 3, 51 ; Aul. 4, 10, 38 ; Capt. 2, 2, 71 ; Curc. 2, 2, 9 ; 4, 2, 18 ; as also in Ter.) The adjective *sestertius* is generally admitted to be a contracted form of *semis-tertius* ‘half-the-third,’ and so, like the G. *andert-halb*, $\frac{1}{2}$ well fitted to denote the mixed fraction $2\frac{1}{2}$; and the contraction is just what was likely to have occurred in a word of this class. Indeed we have a precisely similar contraction in the O. Frisian *other half* cut down to *or-half* (compare our own *or* = the G. *oder*). *Sesquis* again, signifying $1\frac{1}{2}$, we may safely assume to have been compressed from *semis-sequis*, where *sequis* is that lost adjective of which *sēquius* is the neuter comparative, while *sētius* (*i. e.* *sectius*) is another variety of the same.

N. *Festra*, as a variety of *fenestra*, is given by Festus (p. 91) ; and so we should read, without altering what is written, in Plautus (Rud. 1, 1, 6), “ Inlústriores fécit fenestrasque índidit ”

(add Cas. 1, 44; Glor. 2, 4, 26). A similar shortening of pronunciation of *ministerium*, *ministro*, etc., re-establishes harmony in Ps. 3, 1, 6; St. 5, 4, 7; Epid. 3, 3, 37; for few I think will accept the doctrine that the penult of *fenestra* and *ministro* could be a short syllable. Indeed the Fr. *fenêtre* should have prevented this; and as regards the other words, the Oscan *mistreis*, to which Dr. Wagner refers, and the Fr. *mestier*, aft. *métier*, together with our E. *mystery* in the sense of trade, all speak in favour of a silent *n*. Of *n* as silent before *s* mention has already been made. Let me add that this must be the meaning of Cleodnius (76, 9 K.) when he tells us that the first syllable of *insula* ‘*producitur*’ and ‘*circumflexum accipit*.’ But the same was the case at times when it was followed by *f* or *v*. This no doubt is meant by Diomedes, when he speaks of ‘*o producta*’ in the following passage (433, 15 K), “*conpraepositio complexa f uel s subiunctas litteras producta o pronuntiabitur, f, ut confido confero . . . s ut consulo . . . consul*.” Hence *cos* as the abbreviation of *consul*; for in abbreviating a word it was but natural to drop above all a silent letter. The same writer, speaking of both *in* and *con*, makes the same statement elsewhere (409, 2), giving as examples *insula*, *infula*, etc.; and here the Fr. *isle* follows suit. In the same way Plautus gives to a play the title *Mostellaria* from *monstrum*. So too *Confluentes* as the name of a town became *Coblentz*; and *conventio* appears as *cōventio* already in the Bacchanalian inscription before it passed into the shorter *contio*, still ridiculously written as *concio* in many editions; while *conuentus* passed into French as *couvent*, and into English as *Covent* (-Garden).

V-consonans. The cases of *providentia* reduced to *prudencia*, of *diues* reduced to *dis* in Terence, and *diuitiae* so frequently doing duty as a cretic in the comedians, with *ditior ditissimus* employed as the only forms, and again *iunior* in place of *iuuenior*, should I think have deterred recent prosodians from treating *iuuentute*, etc., as quadrisyllabic words with a short antepenult in Plautus (*Most.* 1, 1, 29), “*Quo nemo adaequo iuuentute ex omni Attica*” (add Ps. 1, 2, 68; *Cure.* 1, 1, 38; *Capt.* 1, 1, 19). So *auunculus* becomes in sound for Plautus a trisyllable in (*Aul.* 4, 10, 48) “*Génere quo sim gnátus, hic mihi est Megadorus*

áuunculus;" (add 4, 7, 3; 4, 10, 52); and hence the modern *oncle* and *uncle*. *Obluiscor* read as *obliscor* in Glor. 418, 49, and Capt. 5, 3, 8, prepares us for the part. *oblitus*; and Cicero's story about the identity of the sound of *Cauneas* with *caue ne eas* in like manner accounts for the shortened pronunciation of *cauillatio*, etc., in Plaut. Stic. 1, 3, 75; Truc. 3, 2, 15, 17, and 18. Ritschl in his Prolegomena has noticed the monosyllabic sound of several words, as *bôues*, *ôuem*, etc., as Bentley had done in the case of *nôvus* and *lêuis*. But while a *v* was often silent, it ceased in some instances to be written, and so obscured the derivation. Thus I think it possible that *conari* may have originated in a lost *co-uin-ari*, the *uin* being one with the Gr. *Fw-* (nom. *ις*), 'a sin-ew,' which however appears in Lat. as *uis*, *uīr-es*, etc.

L. The disappearance of *l* in the conjugation of *volo*, as in *uis* (for *uois*, *uolis*), and *inuitus* for *inuolitus* (cf. for form *miseritus*, *pertaesus*, *solitus*), as also in Fr. *veux*, *veut*, *voudrai*, and E. *would* with its silent *l*, seem to explain the abbreviated sound of *uoluntas* and *uoluptas* in Plautus and Terence, as in Pl. Ps. 1, 5, 123, "Tuá uoluntate? Iús bonum orat Pséudulus;" St. 1, 2, 2, "Néc uoluntate id fácere meminit . . ."; Trin. 5, 2, 42, "Si id mea uoluntáte factumst . . ."; Ter. Haut. 5, 4, 2, "Fúerim dictus fílius tuos uóstra uoluntate: óbsecro;" and again, Pl. Most. 1, 3, 92, "Órnata ut sim, quom húc adueniat Philolaches uoluptás mea;" add 1, 3, 136; Merc. 3, 2, 5, "Voluptáte uino amóre delectáuero;" add Ps. 1, 1, 67; 5, 1, 12, and 34; St. 5, 2, 9; 4, 1, 27; etc. Then in Ter. Haut. 1, 1, 97, "Nec mihí fas esse [so Bemb.] ullá me uoluptate híc frui;" add Andr. 5, 4, 41; 5, 5, 4; Haut. 1, 1, 19; 1, 2, 10. Yet it is proposed by others in such lines to treat the penult of *uoluntas* and *uoluptas* as short syllables (Wagner's Aul. pr. pp. 44 and 49). As the Lat. particle *aut* is undoubtedly shortened from *alterum*, we have already an instance of a silent *l* after *a*, with a strengthening of the vowel, which is so common in Fr., as *altus haut*, *aux* for *à les*, *Auxois* for *Alesiensis*. Cf. too our *calf*, *calm*, *talk*, etc. Hence Lat. *causa* probably grew out of *calsa*, 'a legal summons;' and again the town now called *Alfadena* must already have had that name before it took the Roman form *Aufidena*.

But the most striking instances of lost mutes are seen in the passage of Latin words into French, chiefly of *g*, *c*, *d*, *t*, when flanked on both sides by vowels; and I prefer to take my examples chiefly from the geographical field, as here there can be no doubt of the derivation. Thus we have *Augustodunum*, *Ligeris*, *Sequana*, *Melodunum*, *Rhodanus*, *Redones*, *Rotomagus*, *Aquitania*, now appearing as *Autun*, *Loire*, *Seine*, *Melun*, *Rhône*, *Rennes*, *Rouen*, and *Guyenne*.

Class of C. nouns, such as

Lastly, the loss of a *g* appears all but invariably in the English *rain*, *gain* (*gain-say*), *wain* (also *wagon* or *waggon*), *hail*, *sail*, from the G. *regen*, etc.

One of the most interesting cases of suppression of whole syllables is where it is invited by the repetition of identical or all but identical syllables, as in *μωνυχος* for *μωονυχος*, *idolatry* from *ειδωλο-λατρεία*, *quingenti* for *quinguingenti* (cf. *quadringenti*, *septingenti*), *quini* for *quinguini*, *stipendium* for *stipipendium*, *veneficus* for *venenificus*, *dicier* for *dicerier* (cf. *laudarier*). So in our language a chemist speaks of *formic* acid rather than *formicie*; and a writer in the 'Times,' dating from Pimlico, signs his letter as *Pimli cola*, meaning *Pimlico-cola*. *Soror* claims a shortened pronunciation in not a few passages of the comedians, as Pl. Poen. 1, 2, 84; St. 1, 1, 18, 20, and 68; Ter. Eun. 1, 2, 77. Here Dr. Wagner would drop the final *r*, so as to reduce the word to a pyrrhic; but I should prefer the sound *sōr*, which would agree with the French *sœur*; and in fact the Romans so arrived at the form *mos*, *moris*, *mores*, a word which again appears in French as *mœurs*. *Mos*, as coming from *moros* (*moror* or *mosos*) directs us to look to the Greek *μεν* of *μῆνως*, seeing that *merus* represents *μωρος*, *dīrus* *δειρος*, *vis* *ῥῖς* *ῥῖς* *Fives*; and, lastly, *mora* represents *μωρη*. But *μεν* of *μῆνως* appears in Latin as *man* in *manco*. Thus *mos moris* will correspond in form, as it does in meaning, with our *manner*. It is a general habit of language to denote the idea of custom by a verb which signifies permanence of some kind. Thus the German *sitte* is akin to our verb *sit*; *solco* of the Latin, in like manner, to *solium*, *sella*, *sedes*, *sodalis*, and *sedeo*. The verb *maneo* seems to have for its German analogue *wohnen*; and if so, our *wont* is of the same stock. Of course we owe our *manner* to

the Fr. *manière*, in Ital. *maniera*, which ultimately come from *manere*.

I take another word in which the repetition of a syllable seems to have led to contraction, and so to have hidden its origin. As the Latin *res* in my view stands for *er-es* and so is a derivative from *es-se* (cf. *cram*, *ero*), with the meaning 'that which is,' 'reality,' as when *re* is opposed to *uerbo*, to say nothing of our adj. *re-al*, so I hold *uērus* to have arisen by compression from *uēr-ērus* and so to have come from the same verb *es-se* when it still retained its initial *v* (*w*) as in our *was*, the G. *wes-en*, Icel. *ver-a*, and the Latin *uescor*,* which again, losing its digamma, led to *esca* and *esculentus*. *Ero-*, I need hardly say, is a familiar suffix of Latin adjectives; and if *miser*, *ruber*, etc. drop the final *us*, *uer-us*, like *ferus*, may be excused for retaining it on account of its brevity. This etymon receives support from the fact that it gives to *uerus* the same origin as belongs to *ετ-υμος* and *ετ-εος*. I had once thought that *nutrix* was an instance in point, standing for *nutritrix*,† especially as *nutritor* exists. But I now take another view of the matter, holding that the verb *nutrire* is the child, not the parent, being itself formed from *nutric-*, precisely as our own verb 'to nurse' comes from the noun *nurse*, which is in fact one with the Fr. *nourrice*, i.e. *nutrix*. The older form of this Latin word was in fact *notrix*,‡ and so it was a derivative from *nosco*, with the meaning probably of 'sage-femme.'

* See below.

† Still Charisius (44, 7 K.) looked upon *nutrix* as having superseded a more genuine *nutritrix*.

‡ Quint. i. 4, 16.

CHAPTER XI.

APOCOPE, OR CURTAILMENT OF FINAL LETTER OR LETTERS.

As a final *m* in Latin was pronounced but faintly, its omission was common, so that in Mommsen's Corp. Inscr. the index supplies above eighty examples. So a final *s* also was often treated as nil in Latin poetry as in the often-quoted hexameter from Ennius:—

“Tum lateralis dolor, certissimus nuntius mortis;”

and this habit prevailed not merely in the old comedy, but was available for Lucretius and Cicero. The final *d* again of the ablative gradually passed out of use, yet for a time left a final *e* as a long syllable, as in “dotē,” Plaut. Trin. 3, 2, 88; “furfurē” (so the MSS.), Capt. 4, 21, 27; “ex fratrē meo” (so Bemb. 1 *m.*), Ter. Ad. 1, 1, 15. But I need not dwell on this subject, as in considering the theory of ‘paragoge’ numerous instances came under view. I will confine myself therefore to the case of *enim*, which seems to me often to call for some such pronounciation as *en*; for instance, in the Andria, 1, 3, 1: “Enimuéro Daue níl locist segnítiae nec socórdiae;” add Plaut. Aul. 3, 5, 26; and I find in this supposition an explanation of the fact that down to a late period a mere **N** or *n.* was held to be an intelligible symbol of the particle (see for example the ‘index siglarum’ attached to Lachmann’s Gaius, p. 468, and the edition of the Grammarians by Putschius).

Here I close my remarks on the grammatical figures, but not without a feeling that such violent changes in the beginning, middle, and ending of words threaten to make our enquiry one of great difficulty, especially when we add too the frequent

interchange of letters. The result at times will be that two words identical in origin have lost all family likeness. Who for example would expect to find that the Latin *ille* is one with E. *you*, the Latin *talis* one with our *such*, *anas* one with our *duck*; or, what would be thought still more outrageous, that the Greek *ἱος*, E. *son* and L. *filius*, are all one, as also *θυγάτηρ*, *daughter*, and *filia*?* A belief in such assertions can only follow close investigation, and so demands great caution. But caution is also to be recommended in opposite cases, where it is assumed that two words must be one, when identity of sound is combined with identity of form. Thus the Spanish *mucho* means ‘much,’ and yet the words are wholly unrelated, the Spanish term representing the Latin *multus*, as *cuchillo* ‘a little knife,’ is one with the L. *cultellus*; while *multus* belongs to the family of *πολυς πολλοι*, etc. (cf. our *Polly* and *Molly*, *polluo* and *μολυνω*, *p(o)lumbum* and *μολυβος*). On the other hand our *much* has been influenced by that habit of southern England which substitutes *ch* for a *k* sound (cf. *which* for *whilk*, *such* for *thilk*, *church* for *kirk*), and so implies an older *muck*, which is still preserved in *muckle* and *mickle*; and this *muck* again is the E. analogue of L. *mag-* (*magnus*) and Gr. *μεγ-*, in obedience to Rask’s law. Thus we are carried to two words, *μεγ* and *πολ*, which have nothing in common.

Again it will at times be found that in the process of derivation the parent word wholly vanishes. For example, from the preposition *ec* (*e*) came first a derivative *ex*, then *extra*, then *extraneus*. From this the Italian, by the addition of another suffix, formed *straniero*. Similarly the Fr. deduced their *estranger étranger*, and we our *stranger*, in which there is no trace of the original *ec*. Again *dem*, the dative of the G. definite pronoun, has a suffix in *m*, *de* alone belonging to the stem of the word and corresponding to our *the*. Prefix to this a prep. *an* ‘on’ or *in* ‘in,’ and the result is *am* ‘on the’ or *im* ‘in the,’ from which the stem has again vanished.

* See ‘Trans. Ph. Soc.’ for 1866, p. 1; and *ibid.* for 1868–9, p. 257.

CHAPTER XII.

THE VERB.

IN accordance with the argument of the first chapter I give precedence to the verb over the other parts of speech; and one of the most important attributes of the verb is time, or, in grammatical language, tense. This however may be regarded under two aspects, absolute and relative. In its simpler aspect it divides itself into three parts, the past, the present, and the future; the first and last of which are infinitely large, the second infinitely small, so that the ratio of the past or the future to the present is in mathematical language infinity of the second order. But in truth the past and future, though infinite in the contemplation of the philosopher, are for the practical purposes of life for the most part limited, and indeed for the wild savage exclusively limited to the recent past and to the early future; while the present, though strictly but a point, is allowed in language to encroach on both of its neighbours. Although the *hodie* of *hodie* and the *to* of *to-day* mean what is present, yet the terms are permitted in practice to include much of the morning that is really past, much of the afternoon or evening that is yet to come.

By the phrase *relative* time I mean that view of time which grammarians express by the terms 'perfect' and 'imperfect;' by 'perfect' meaning the precedence of one act to another, by 'imperfect' the coincidence of one with another. Thus *scripsi* 'I have written,' speaks of that which is now complete; *scrips-eram* 'I had written,' of that which was already complete at some past time; *scrips-ero* 'I shall have written,' of what will

be complete at some future date. These of course stand opposed to those other ideas, where the act is spoken of as imperfect or still going on, viz., 'I was a-writing,' 'I am a-writing,' 'I shall be a-writing,' where I purposely employ the older form. There remain yet two other tenses which speak of an act in the past or future, but without any clue to the precise point of time, what we may perhaps call a past aorist and a future aorist, 'he wrote' and 'he will write,' referring to a mere point of time in the past or the future, and that without any limit; and when I say a mere point of time, I have thought that the mind in so dealing with the distant past or future is disposed to regard not so much the duration of the act as the simple fact of its occurrence. So in the physical world the largest object when removed to the furthest limit of vision is reduced to a mere point.

Now when language was in its infancy, for this, like all the other sciences, must have had only a rude beginning, the thoughts of man being all but wholly limited, as I have said, to the recent past and early future, such aorist tenses could not have been in much request. Accordingly there will I think be found evidence that the so-called aorists of past time were in origin past imperfects or present perfects; and again that the so-called futures were not futures at all.

The present time, as the one of most pressing interest for us all, claims our first attention. Yet after all, that tense which we call a present tense has no intrinsic title to the name, seeing that in itself it possesses no element which defines time. The forms *ĕdo*, *ĕdis*, *ĕdit*, etc. speak of an act and speak of an agent, but the time is mere matter of inference; but the inference is a natural one, and as soon as special forms got into use for the past and future, the absence of these strengthened the inference. But in fact the so-called present is somewhat freely applied to both the past and the future; to the past, for example, in the so-called historic present, and generally when the context is sufficient to fix the time, as in the familiar Latin construction, *Dum haec dicit, abiit hora*, for here the conjunction *dum* 'whilst' identifies the time of the two actions spoken of, so that, not

expressed in *dicit*, it is determined by the tense of *abiit*. Again in speaking of customs, the simple indefinite form is only the more applicable, because it is silent on the question of time. The phrase *Ligeris in Oceanum influit* was true in Caesar's time, is true now, and we may assume will continue to be true for all time short of a geological cycle.

In the Semitic languages again it was for a long time matter of controversy, and in England seems still to be matter of controversy, whether a certain form is a future or not. Thus we still find in current Hebrew grammars the broad assertion that "Hebrew verbs have no form whereby present time can be indicated." The book to which I am referring further lays it down that the indicative mood in Hebrew admits only of two tenses, the past and the future. It appears however that some grammarians look upon the so-called future as an aorist. This is the term preferred by De Sacy for the corresponding tense in Arabic (§ 327 of his Gr.); while Caspari, who is followed by his translator Professor Wright, uses the term 'imperfect'; and I learn from the latter gentleman that in Germany Ewald was the first to adopt this name of the tense, and that his example has been so generally followed in Germany, that no other term for the tense seems now to be in use. Gesenius however appears to have lent his sanction to the old doctrine that the tense is strictly a future, and Dr. Kalisch still adheres to the same.

The unsuitableness however of this name will I think be apparent from Dr. Kalisch's own examples. This writer divides the uses of the tense into fourteen heads, of which two alone refer to actual futures. His third section speaks of the use of it as a present in such sentences as: "The nations *meditate* vain things" (Psalm ii. 1); "Why *do* you *come* out?" (1 Sam. xvii. 8); the fourth quotes: "Then Moses *set apart* three towns" (Deut. iv. 41); the fifth: "He *found* it in a desert land . . . he *observed* it . . . *guarded* it," etc. (Deut. xxxii. 10); the sixth: "The earth *swallowed* them" (Exod. xv. 12); the seventh: "This *is not done* in our place" (Gen. xxix. 26); "The righteous *flourish* like the palm-tree" (Ps. xcii. 13); and: "Thus he *used to do* year after year" (1 Sam. i. 7). Now it is sufficiently strange

that a future should be used as a present; but nothing to an ordinary mind can seem more unreasonable than to employ a future for a past. On the other hand to employ a present as a past or future has nothing in it repulsive to common sense, for the historian naturally wishes to place his narrative before one with all the life of what is actually passing, so that a present is specially suited for his purpose; and again the seer or prophet desires to realise, and perhaps actually fancies that he sees before him, what he is prophesying.

The term 'aorist' then, as used by De Sacy, is correct, if we look into the form of such a word as *ědo*; but when we know that in practice the word is habitually used as a present, we may well acquiesce in this name. But the term 'imperfect' seems out of place, especially when we have before us such a quotation as that given in Kalisch's grammar, "The earth swallowed them up."

It will have been often noticed that the so-called present tense and the other non-perfect tenses have not unfrequently a long vowel or diphthong in place of the short vowel of the stem, as *τερω*, *τενω*, *φαινω*, *φενγω*, *τριβω* (cf. *ετριβην*) *dūco* (cf. *dux dūcis*, *edūco*), *dīco* (cf. *malidīcus*), *scribo* (cf. *conscribillo*), and again that the final consonant of the stem is strengthened, so to say, by an excrescent letter, as *τυπτω*, *tendo*, *tango*, *-cumbo* (*incumbo*). A friend and colleague has suggested to me an explanation of this, which recommends itself by its reasonable character, and especially by its harmony with the mimetic theory of language. We ourselves take the liberty of lengthening out the vowel in "he came *creeping* along," "how fearfully he *draaawls* out his words," to express the unusual duration of an act. On the other hand the short penult of *ετυπον*, *ελαβον*, *ελαθον*, *ετριβην* is in agreement with the momentary action expressed in this tense.

But to proceed with our subject, I first ask myself how are we to express time? and in deliberating on this question I am led to the conclusion that the simplest course is to look to the idea of space as that by which time is always measured. But to mark the relations of space and motion is the special office

of prepositions; and accordingly I come upon the phrases, '*je viens de dîner*' of a recent past, '*he is at dinner*' of a present, '*he is to dine* with me this evening' of a future, where the little words *de*, *at*, and *to* play the leading parts. These phrases have their immediate relation to the present; but we may also modify them so as to refer to the past or future, as *il venait de dîner* 'he had just dined,' '*he was at dinner*,' '*he was to dine* with me that evening,' and so on.

The form 'I am a-writing' is now it is true obsolete, but this for the philologist is a recommendation, who can more safely argue from the nursery-words, 'Daddy's gone *a-hunting*,' or from provincial phraseology, such as: 'Her isn't *a-calling* of we, us does not belong to she,' 'he was *a-beating* of me,' than from the most refined language of the senate or drawing-room. Yet Shakspeare too has, 'There is some ill *a-brewing* towards my rest' (M. of Venice); 'Anne Page is at a farm-house *a-feasting*' (Merry W. of W.); 'he's *a-birding*, sweet Sir John' (ibid.); 'which she did use, as she was *writing* of it' (As you Like it). The *a* of the phrase *I am a-writing* is of course one with our familiar *on* or *in*. We might have inferred this from the double use of *on board* and *a-board*, *on foot* and *a-foot*; but a brief examination of our old writers will abundantly prove the fact. Thus Mann-deville has: "Ne non that goth *on beggyuge*;" Chaucer (v. 1689): "*On hunting* ben they ridden;" and (v. 13667): "*Ride on hawking*." So too the Bible (St. John ii. 20): "Forty and six years was this temple *in building*," where by the way we have a passive use of the phrase; much as we say, "*to let* a house," or "a house *to let*."

That we have really an abstract substantive in the phrase 'I am writing' is proved not merely by the old insertion of the preposition *a* (= *in* or *on*), but also by the use of the following *of*: 'a beating *of* me,' which precisely corresponds with the use of the genitive after the gerund in the Latin *cupidus eius uidentis* 'desirous of seeing of her' of Terence (Hec. 3, 3, 12), and *reiciundi trium iudicum potestatem* of Cicero (Verr. 2, 2, 77).

But to this use of a preposition to mark an imperfect tense

Latin writers are no strangers. Thus Cicero (Att. 5, 16, 1) has *eram in cursu*, and Ovid *Vox erat in cursu*, F. 5, 245, and Amor. 1, 8, 109.

In the Keltic languages a similar construction is abundantly used. Thus in the Gaelic (Highland Soc.'s Gr., p. 21, Compound Tenses) we find :

ta iad ag	iarruidh'	they are a-asking	} literally, 'sunt or sum in rogatione;'
ta mi 'g	iarruidh'	I am a-asking	
ta iad a'	dèanamh'	they are a-doing	} lit., 'sunt or sum in actione.'
ta mi	dèanamh'	I am a-doing	

Where it may be noted that the full preposition is retained under the favourable circumstances of being preceded by a consonant and followed by a vowel; whereas if a vowel precede, then the *a* vanishes; and if a consonant follow, the same fate awaits the *g*. Thus in the fourth example the preposition is wholly absorbed.

So in Welsh we find: *yr wyf yn caru* 'I love,' lit. 'I am in love,' a phrase quite intelligible for us; *yr ydych yn gwybod* 'ye know,' lit. 'estis in scientia;,' *oeddw'n yn mynd* 'I was going,' lit. 'eram in itinere.'

For the Breton I will merely take from Legonidec's Grammar: *ober* 'faire,' *och ober* 'faisant,' *kan-a* 'chanter,' *o kan-a* 'chantant,' *bez-a* 'être,' *o bez-a* 'étant;,' in which phrases the Breton *och* is one with the Gaelic *ag*, and like it drops its consonant before another consonant. It is probably from Gallic influence that the existing French employs such forms as: '*En disant* ces mots il sortit de la chambre.'

With these several facts before me, I cannot help suspecting that in the Latin imperfect participle, *scribens* for instance, the crude form *scribenti-* (witness the plural forms *scribentia*, *scribentium*) is made up of an infinitival form *scriben* and *i* for the preposition, or rather postposition, *in*, the *t* being an outgrowth from the nasal liquid; and the suspicion is strengthened when I find in the Norse a general term for the names of agents made up apparently in the same way, as *domand-i-* 'doomer,' *búand-i-* 'yeoman,' *elskand-i-* 'lover,' *lesand-i-* 'reader,' *sækjand-i-* 'suer.'

In the imperfect participle of the Greek verb all trace of a post-position vanishes ; yet the loss of such a suffix would be in keeping with our own use nowadays of *writing* for *a-writing*, and with the occasional entire loss of *ag* in Gaelic. At any rate it can scarcely be accidental that the Greek part. τυπτομεν-ος bears so strong a likeness to the old infinitive τυπτεμεν.

CHAPTER XIII.

PERFECT TENSES.

I TAKE first the question of reduplication, in order to remove what I believe to be a misconception. It is often laid down that this doubling of the root syllable is a natural mode of expressing the idea conveyed by the term perfect or past;* and certainly it must be admitted that reduplication prevailed to a considerable extent in the formation of perfect tenses. The evidence of the Greek, Latin, Sanskrit, and Gothic languages is decisive on this point. At the same time it does not immediately follow from this fact, that it was through reduplication that the perfect tense obtained the power belonging to it. It may perhaps be argued that there is some connection of idea between the terms 'perfect' as used of verbs and 'superlative' as used of adjectives; and further urged that in not a few languages the repetition of the simple adjective serves at once as a superlative, for instance in the Hebrew. The Breton too from *mád* 'good,' has *mád mád* 'best,' from *fall* 'bad,' *fall fall* 'worst;' and our own Shakespeare found an expressive superlative in *wonderful wonderful*. So again the French have the term *bon-bon*, translated by English children into the corresponding *goodie-goodie*. This is thoroughly intelligible; for as the simple adjective *good* makes its selection out of all that is good bad or indifferent, so a second selection may well be made out of the category 'good'; and thus we arrive at any rate at a class of 'very good'; and by a similar process may hope to attain to the very highest degree of goodness, that is, to 'the best.' But the next step in the argument fails. The super-

* "Die Reduplication ist der wirkliche Ausdruck der Vergangenheit."—Bopp's V. G., § 605, note 1, p. 485.

lative among adjectives and the perfect as used of verbs have not that common meaning which at first sight may seem to belong to them, for the latter speaks only of an act finished, it is true, but without any laudation of that act.

Then again we find on a closer inspection that reduplication is noway confined to perfects. The Greek verbs *μιμν*-, *πιπτ*-, *γγν*-, *διδωμι*, *τιθημι*, *τιτρανω*, *ολολυζω*, *καρκαρω*, *παμφαινω*, *ακαχιζω*, the Latin *sist*-, *gign*-, are not the less reduplicative, because some exhibit a vowel *i*, while the perfects have for the most part an *e*, for an ascent to the earlier forms would no doubt have given us in both cases a mere repetition, or at any rate something nearer to a repetition of the root-syllable. Thus for the perfect we find the root-vowel preserved in *monordi*, *spopondi*, *scicidi*, *tutudi*, *cucurri*, as well as in *tctendi*; the Sanskrit supplies us with *tutópa* = *τετυφα*, *tutápa* = *τεταφα* (Bopp, V. G. § 597); and the Gothic places before us *húiháit* 'called,' *skáiskáid* 'separated,' *stáistáut* 'struck.'

In fact in the early stages of language there seems to have prevailed a general fondness for repetition, but without attaching to it any grammatical idea. The sole object was the clearer, perhaps the more impressive, conveyance of the idea. Thus in South America we find a river *Bio-bio*, a lake *Titi-caca*, a rodent *tuco-tuco*. So too the New-Zealander's vocabulary swarms with substantives, adjectives, and verbs of such formation as *mati-mati* 'toe,' *émi-émi* 'tree,' *kiri-kiri* 'gravel,' *motu-motu* 'embers,' *áuge-áuge* 'thin,' *háu-hau* 'brisk,' *koro-koro* 'loose,' *úko-úko* 'to split,' *áki-áki* 'to urge,' *átí-átí* 'to drive away.' Our own ears are familiar with such forms as *talkie-talkie*; and we seem to find them of especial value in our dealings with barbarous nations. Not unlike these is our own extensive family of words like *wishy-washy*, *fiddle-fiddle*, *tittle-tattle*; and again in Latin such substantives as *ciconia* for *conia*, *cucumis*, *cucurbita*, *curculio*, *susurrus*, *tintinnabulum*.

From all this it seems to be a reasonable inference that reduplication in the outset was not employed to denote any relation of time; and I hope to show that the same course of proceeding which guided us in the examination of the imperfect tenses will

bring us to a right conclusion here. As the idea of a preposition gave the clue to the phrase 'I am writing,' so possibly we may find that γεγραφα and *scripsi* meant in themselves 'I am from writing,' 'je viens d'écrire.' But let us examine this matter more closely.

Already in the last syllables of *scripseram*, *scripsero*, *scripsirim*, *scripsissem*, *scripsisse*, we find what is a sufficiently good representative of the tenses of the Latin verb for 'to be,' viz. *eram*, *ero*, *sim*, *essem*, *esse*; for I do not stop to deal with such a petty difference as between the vowels of *essem* and *scrips-issem*, seeing that the Germans write *ist* as the analogue of the L. *est*, or the appearance of an *e* in *scripsirim* by the side of *sim*, for Varro himself tells us that the forms *sum*, *sumus*, *sunt* grew out of *esum*, etc.; or again of an *r* in *scripsirim* as contrasted with *sim*, since an *r* is already seen in *eram* and *ero*. But the analogy will not be complete unless we account for the differences which are only too marked between the endings of *scripsi*, etc., and the several forms of *sum*, etc. Two of these indeed are all we could desire. *Scripsistis* corresponds with all exactness to *estis*; and if *scripsistis* as a plural is justified, the singular of the same person may well be *scripsisti*. *Scripserunt* again compared with *(e)sunt* only offends by the quantity of the *e*; but here we are entitled to fall back upon *scripsērunt*, for examples of such short penults were not unknown to the poets of the Augustan age, and are yet more common the higher we ascend in the literature; and these examples would be found to be more numerous but for the tampering of editors. Thus Ritschl might well have followed the guidance of what he

Stic./ thought he found in the palimpsest (2, 2, 61):—

Málivoli perquisitores áuctionum périērunt.

Still there is a difficulty which overhangs this assumption. If *scripsērunt* be older than *scripsērunt*, we have what is at first view a violation of a law which governs the changes of vowels. The passage from long to short is a common and a natural occurrence. But I find an explanation of the anomaly in this particular case. The five forms which preceded the third person of the plural having, as will soon be made to appear, a long syl-

lable in the place which corresponds to the penult of *scripserunt*, there was a natural tendency to extend this to the last of the series; and so *scripsērunt* got established in place of the more legitimate *scripsērunt*. We have in fact what is precisely parallel in the past perfect of the Greek verb: *ετετυφ-ειν -εις -ει; -ειτον -ειτην; -ειμεν -ειτε*, which led almost irresistibly to *ετετυφεισαν*. Yet we know that the older and more correct form was *ετετυφεισαν*; and indeed, as *εσαν* of the Greek substantive verb had undergone no contraction, the short *ε* alone is justified by the formation. Still *ετετυφεισαν* eventually maintained its position. The same applies to *esunt*, as seen in *scrips-ērunt*. The Italian too by the accent of its form *fécero* confirms the doctrine.

From the plural of the third person I go back to the singular; and here theory suggests a form *scripsist*, while practice seems to present us with *scripsit* alone. A due search however will not merely guide us ultimately to the very form *scripsist*, but also establish on the surest ground that the third person of the Latin perfect originally ended in a long syllable *scripsīt*. This doctrine Ritschl in his *Prolegomena* to the *Trinummus* (p. 135) treated with something of contempt: "Apage igitur *uendidit*," said he, in reference to the line of the *Captivi* (prol. 9): "Eumque hinc profugiens uendidit in Alide;" and as there happened to be at least ten lines in Plautus where a long perfect in *it* before a vowel presented itself, Ritschl found abundant employment for his talent in reducing to order the rebellious passages. However in a later publication (*Pseud. praef.* p. 14, and again at v. 311) he gave up the point, confessing that Fleckeisen had satisfied him that this termination might be long. It was time he did so, for not only do Horace and Ovid present us with such forms as *perrupit*, *subiit*, *redit*, *praeteriit*, but Corssen (*Aussprache*, etc., vol. i. p. 353, first ed.) has given us an extensive yet far from complete list of instances, including four from Virgil (*enituit*, *Geor.* 2, 211; *petiit*, *Aen.* 10, 67; *illisit*, 5, 480; *subiit*, 8, 363); and he adds to these from inscriptions of authority *REDIIT* and *PERIIT*. Below we shall find confirmation in the Sanskrit. So far I have only succeeded in establishing for the Latin perfect a final *ū*. The old French language carries us a step farther;

for Diez (2, 200, etc.) gives us numerous examples, as *chaus-ist*, *fauls-ist*, *vaus-ist*, *vous-ist* from verbs in *-loir*, together with *ars-ist*, *remans-ist*; from which forms we may conclude that *trest* (for *traist*) and *mist* in a quotation of Raynouard (Gr. Comp. p. 372), as also *dist*, *prist*, *rist*, given by Diez, have in *ist* an ending of the same origin.

In the first person plural, if *sumus* is to enter into the formation, we ought to have *scrips-ismus*, but we find only *scrips-ïmus*. Here the Latin language offers no explanation; and thus when dealing with the question on a former occasion (in a 'Rejoinder' to the 'Reply' of the Rev. J. W. Donaldson, 1844, and Proc. Ph. S. iv. p. 37), I had recourse to the Illyrian Grammar, from which I quoted the present and perfect tense of the verb *vidi-ti* 'to see,' as :—

Pres.: vidim vidis vidi; vidimo vidite vide

Perf.: vidyeh vidye vidye; vidyesmo vidyeste vidyeshe

while *ye yesmo yeste* are severally the 3rd sing. and the 1st and 2nd pl. of the Illyrian verb 'to be.'

But, the Italian *facémmo* and the Spanish *hicímos* by their accents speak strongly in favour of an original Latin *fecismus*. Still more decisive is *feismes* of old French (Diez, 2, 201), backed as it is by *traismes*, *deismes* (ibid.); and when Diez, speaking of the last verb, adds "mit eingeschobenem s," he shows that he is an unwilling witness in my favour; and I am glad to find his admission that the forms with this *s* are more numerous than those without it.

But if a plural *scripsismus* be thus theoretically established, it follows at once that the singular must have been in earlier times *scripsism*, which would naturally pass through a form *scripsim* to *scripsi*, for the loss of an *s* before *m*, so common in the languages derived from the Latin, was also well known to the Latin itself, as in *camena-*, *remo-*, *pomoerio-*, and *dumo-* by the side of *dusmoso-*; and the loss of a final *m* in the first person of verbs is what we are familiar with in *scribo scripsero*, γραφω γεγραφα εγραψα, this *m* reappearing in the plurals *scribimus*, γραφομεν, etc. Nay γραφ-α itself not merely represents a lost

γεγραφ-αμ, but this αμ is itself a corruption of εμ, that is of εσ-μ, for the Greek perfect and past-perfect will be found to have been themselves formed on the same model as *scripsi* and *scripseram*; and indeed in 3rd p. pl. γεγραφ-εσαν the last portion is as near an equivalent of the corresponding part of *scrips-erant* as the Greek language could tolerate; and so too the first person sing. γεγραφ-ην (or -ειν) and -εα end with what is equal to the Latin *eram*.

The part which the Latin verb *es* 'be' plays as a suffix in the formation of perfect tenses having been thus fully examined, the next subject for enquiry is the nature of the element which intervenes between the root-syllable and this suffix. In *scripsi* we find an *s*, in *amavi* and *colui* a *u*, in *fecī meminī* nothing whatever, in γεγραφα merely an aspirate, in πεφίληκα, εσταλκα a κ. Of these the form *scrip-s-i* supplies the very suffix which was required to complete my theory, a symbol which may denote a genitive, 'from;' and the ordinary suffix of the genitive is *is*, so that *scripsi* literally translated is 'I am from writing.' The words 'I am' by themselves would have done little to support my theory, as they are equally wanted for the imperfect 'I am a-writing,' and for the future 'I am to write.' Then for *fecī* I might plead that the disappearance of an *s* is a very common occurrence, and this especially in the genitival suffix, as *musae*, *domini*, *Achilli*, *diei*, and *mei*, *tui*, *sui*. But I have a more certain defence in the doctrine, that when a syllable is followed by another of like form, one of the two is very commonly absorbed (see p. 137). On this principle *fec-is-ism fec-is-isti*, etc. would naturally be shortened to *fecism*, etc. so as wholly to destroy all trace of our genitival suffix. Indeed the case has something like a parallel in a form of abbreviation which runs through the Latin language of all ages, as *sumpse* for *sumpsisse* Naev., *despexē* Plant., *iusse* Ter., *inuasse* Lucil., *abstraxe* Lucr., *subduxe* Varr., *uixet* Virg., *erepsemus* Hor., *affixet* Sil., *scripse* Aus.

Before dealing with the *u* of *amavi colui* I prefer to take the Greek πεφίληκα εσταλκα which may serve as a stepping-stone, for the κ may well be due to a genitival suffix, if we may follow the guidance of the Sanskrit pronouns *asmākam* 'of us,' *yushmākam*

'of you,' seeing that the base of these pronouns is *asmat* and *yushmat*, and *am* a suffix of plurality like *um* in Latin, *ov* in Greek; and indeed the interchange of *k* and *s* is very common. But *k* also freely interchanges with a *u-consonans* in Latin, as seen in *uiuo uixi*, *nix niuis*, etc. Lastly, that *u* and *s* in the suffix of the perfect tense may alike be employed for precisely the same office, is accordant with the fact that *caluit*, *ualuit*, *noluit* of the Latin have for their Italian representatives *calse*, *valse*, *volse*. A still more striking and more general habit prevails in the Sard dialect of Italian, where the final *auit* of perfects of the first conjugation regularly takes the form *esit*,* as *resuscitesit*, *visitesit*, *perdonesit*, *portesit*. And again in the same dialect we find perfects of like suffix with a passive or reflective sense, *factesit* for *factauit* = 'factus est.' Then beyond the limits of *a-verbs* *naschesit* compared with the Fr. *naquit* (= 'natus est') contains in the syllable *es* only the genitival suffix. The passive signification is in accordance with what was stated above (p. 145).

But what has been just said, as well as some previous remarks, suggest an enquiry of some moment. I am here again appealing to the modern dialects, as I did a few lines above to the accent of the Italian *facémmo* and *fécero* and the Spanish *hicimos*, and again to the appearance of an *s* in the old French *chausist* (= *caluit*), etc. But is it reasonable to draw arguments in this way from languages which are themselves derived from the Latin, and so cannot honestly have come by aught which they have not inherited from their ancestor? The just answer I believe to be that they are not strictly speaking derivatives from the Latin, but rather from under-currents so to say of the old Italian language, which coexisted with the Latin of the higher classes in Roman society, and which, as a spoken language or languages, had probably a far wider domain than the language of books. The corruption of language, as I have more than once observed, may well be more rapid in the drawing-room and the counting-house than in country districts, where time is accounted of less moment. Thus our own provinces † have for the most

* I take this from the Sard 'Compendio' mentioned above.

† 'Yes, says I,' passes for a gross vulgarism, but is in fact a truer form

part fuller forms of speech than the favoured dialect of society; and thus also the bustling life of the Athenian led to a habit of contracting words, which the Ionic of the country outside of Athens needed not; and much less the broad speech of Lacedaemon. But here again I am falling foul of a common sentiment that provincial dialects should be beneath the notice of philology. Let me once more say that those who are influenced by such feelings forget that the precedence given to the language of a capital is in no way founded on intrinsic merit, but on the contrary is the result of mere accident. Had the capital of France been placed elsewhere, Parisian French would have been called a 'patois.'

I have passed over a little matter which deserves some notice, the change of vowel and of quantity in *feci*, one of a numerous class, compared with *facio*. It has long been taught, and with reason taught, that this *feci* is the result of contraction from a reduplicated *fefci* (*fefei*); and nearly the same view was taken by Bopp (§ 547). Indeed, as regards this particular verb a reduplicated *fefacust* still exists as representing *fecerit*, more strictly *fefecerit*, in the Oscan dialect (s. the Bantian Inscr. l. 11).

But I have here to suggest a change in the ordinary doctrine of such compressed reduplication. When in the 'Journal of Education' of the Useful Knowledge Society (vol. iv. p. 355 of 1832) I suggested that *ueri*, *uerri*, *uelli*, *uisi* as perfects of *uerto*, *uerro*, *ullo*, *uiso* were reduced from older forms *neuerti*, etc. I committed an error in starting from *uerto*, etc. instead of *uorto*, for I might then have arrived at the satisfactory result that *uertit*, *uerrit*, *uellit* as perfects were distinguished in form from the presents *uortit*, *uorrit*, and perhaps *uollit* (cf. *uolsus*). This view receives strong support from the manuscripts of Plautus and indeed other authors. Thus in the 'Sticus' (2, 2, 50) the

of speech, for the old Frisian had *sedsa* or *sidsa* 'to say,' as the mod. Frisian has *sessen* or *sizzen* (Richthofen, v. *seka*); and a Frisian writer quoted by Dr. Bosworth (Origin of the English, Germanic, etc., Languages, p. 72) gives us: 'Krcftich swiet is 't' *sizz* ik jiette, i.e. 'Crafty sweet is 't' says I yet.

parasite on hearing of the arrival of Epignomus from abroad with vast wealth there acquired takes an active part in preparing the house for his reception, saying :

“ Hærcle uero cápiam scopas átque hoc conuorrám lubens,”

but soon after, at the news that the traveller had brought with him a corps of parasites of his own, cries broken-hearted :

“ Reuorram hercle hóc quod conuerri modo ”

(I'll unsweep all I have done). Here I have given the MS. readings of the verbs, but Ritschl *de suo* writes *conuorri*. So again in the ‘Trinummus’ (3, 1, 15) all the MSS. have :

“ V’t agro *euortat* Lésbonicum quándo *euertit* áedibus;”

but Ritschl again substitutes *euortit*. So too in 2, 4, 133 the palimpsest has *uerterit*, but Ritschl *uortertit*; and in the Ps. 2, 3, 16 against all his MSS. he writes *uortit* as an aorist. *Praeuorti* as an infinitive occurs in the ‘Mercator’ (vv. 377 and 379), but in v. 113, where Ritschl writes *caue praeuortier*, his MSS. have the perf. subj. *caue praeuerteris*, which he would have done better to have left untouched. In the Medicean MS. of Cicero’s letters to Atticus *deuorterer* occurs in 8, 7; *deuorterat* in 10, 16, 5. So as regards the verb *uoto* (*ueto*), *uotitum est* is quoted by Nonius from the ‘Asinaria,’ and the palimpsest gives *uotet* in the Trin. 2, 4, 73; but *uetuit* is in the ‘Mercator’ 1, 1, 110, and in the ‘Phormio’ of Terence. It is true that *conuerre* seems to occur in the ‘Sticus,’ 2, 2, 27; but if this be right, the *e* may possibly be due to ‘umlaut.’

But if *feci* and such forms have arisen from a compressed reduplication, *fefeci* *fefeci*, does not a similar compression account for the shortened pronunciation of *dedi*, *dedin*, *dedisti*, *dedisse*, which so many passages in Plautus seem on the evidence of the metre to demand? as,

“ Nam ego áestumatum huic dedi te uigintí minas,” Capt. 2, 3, 4. Add Poen. 1, 3, 7; Trin. 3, 2, 102; 4, 2, 57; Epid. 5, 2, 38; Rud. 4, 4, 127; Most. 3, 1, 115.

“ Dedistin argentum? Fáctum, neque factí piget,” Trin. 1, 2, 90. Add 1, 2, 92; Cure. 2, 3, 66; Men. 4, 3, 18.

"Dedisse dono hodié quæ to illi dónatum 'sse dixeras," Amph. 2, 2, 129. Add Pseud. 4, 2, 33; and Ter. Eun. 5, 8, 15.

Moreover this theory receives no little support from the Romance languages. Thus the Italians from *dedisti* and *dedistis* have deduced *desti* and *deste*; while the tense *dedi*, etc. became in Span. *di diste dió dimos disteis dieron*; and *dederam* and *dedissem* appear as *diera* and *dicse*; and similar changes are seen in Portuguese.

Dr. Wagner in his 'Aulularia' contends that *dedisti dedisse*, etc. in such cases should be treated as *dedisti dedisse*; and in opposition to my view of the matter objects that "the application of late and modern forms to an entirely distant period seems to violate the laws of historical philology;" but he seems here to forget that the principle on which I found my reasoning was already at work in the formation of such perfects as *feci*; and in the ever-changing forms of written language it is a common occurrence, and one indeed to be expected, that orthography is in arrear of orthoepy. We all continue to write *receipt* with a *p*, *through* with a final *gh*, *Leicester* as a trisyllabic word; and it is only among Southerners that *Kirkcudbrightshire* is ever pronounced with its full complement of letters as presented to the eye, while at home the *d* and *ght* are silent, so that the penult is short.

Bopp (§ 546, note **, and § 556) seems to look upon the Latin *scripsi* as in origin rather an aorist than a perfect, and the same opinion is held by others, as Aufrecht and Kirchhoff (Umbr. Sprach. Th. 1, s. 144, § 56); but after the evidence produced I cannot but reject their view, and on the other hand would ask, whether some of the tenses claimed as aorists by Sanskritists are not in fact present perfects in respect of form, as for example the Vedic forms *badh-îm* 'ich tödtete,' *kram-îm* 'ich bestieg,' as well as the more common forms *a-badh-isham*, *a-kram-isham*, quoted by A. K.

But it will be best to give one of these aorists in all its persons and numbers. I take then from the V. G. § 561, the following for the sake of comparison with what I have said:

“S. *a-bódh-isham** -*ís* -*ít*; D. -*ishva* -*ishṭam* -*ishṭám*; Pl. -*ishma*, -*ishṭa*, -*ishus* ;” and better still what he calls a Sanskrit aorist of the 4th form in § 571 of the vb. *ya* ‘go:’ “Sing. *ayásisham*, -*sís*, -*sít*; Pl. -*sishma*, -*sishṭa*, -*sishus* ;” and if we turn to § 545, note 1, we shall find that Bopp himself looks upon the *sh* in the majority of the persons as a substitute for a truer *s*. The comparison of this miscalled aorist seems instructive, as it decidedly confirms the doctrine put forward above, that *scripsi* has grown out of an older *scripsím* and *scripsism*, *scripsít* out of *scripsít*, and *scripsimus* out of *scripsimus*.

But I would venture yet a step further, so as to give the title of a present perfect to a tense which Bopp calls an imperfect, *ásam asís asít*, which he places as equivalents by the side of the Latin *eram eras erat*. The long *i* of the 2nd and 3rd person, on which my argument chiefly rests, seems to have been for Bopp a grave difficulty, for in § 532 he expresses a belief that they had originally beside them the forms *ásas ásat*; and in § 532 he has the courage again to speak of the troublesome *i* as a ‘Binde-vocal.’ Even the first person *as-am* in its suffix has nothing at variance with my doctrine, for the Greek *τετυφ-α* itself stands for *τετυφ-αμ*, and our own language still exhibits the so-called substantive verb in this very shape, *am*. Moreover there is no difficulty in the doctrine that what was in origin a perfect tense should in after time be employed as an aorist or as a past imperfect. “The Sanskrit,” says Bopp (§ 513), “has for the expression of past time the forms of the Greek imperfect, aorist, and perfect, without however attaching to these different forms the different shades of meaning which exist in the Greek.” So again in § 588 he says: “The Sansk. preterite which agrees in form with the Greek perfect is not a perfect in meaning;” and he further notes that the German preterite, which in origin coincides with the Greek perfect and the reduplicated preterite of Sanskrit, has likewise given up its signification as a perfect.

In the perfect tenses of the Greek verb the same formation

* Bopp places the *i* between hyphens, regarding it as a mere ‘Binde-vocal.’

existed as in the Latin; but this is less easy to trace in consequence of the habit of suppressing a σ , especially between vowels, which prevails in that language. Still $\tau\epsilon\tau\nu\phi\alpha$, as I have said, contains the substantive verb in α ($=\alpha\mu$) and a vestige of the genitival suffix (s or is) in the aspirate of ϕ . In the past perfect, as I have already noticed, there is seen stronger evidence, for the first person in its varieties $\epsilon\tau\epsilon\tau\nu\phi\text{-}\epsilon\alpha$ and $\epsilon\tau\epsilon\tau\nu\phi\text{-}\eta\nu$ clearly exhibits what is the equivalent of the Latin *eram*; and still more closely does $\epsilon\tau\epsilon\tau\nu\phi\text{-}\epsilon\sigma\alpha\nu$ coincide in suffix with *scrips-erant*. Even a future perfect probably exists in $\tau\epsilon\tau\nu\phi\omicron\mu\alpha\iota$, when placed by the side of $\epsilon\sigma\omicron\mu\alpha\iota$. The fact that this form is in practice rather a passive than an active constitutes but a slight difficulty, for these periphrastic tenses are in themselves available for either voice, as has been already seen (p. 145).

Let me add that in Latin we have the phrase *censendi causa* 'for the purpose of being entered in the register,' and *adesse ad imperandum* 'for receiving orders.' Then in the sense of a perfect the words 'he is fresh from vaccinating' may be used alike of the child just vaccinated or of the operator.

The Celtic languages exhibit a similar formation of the perfect tense, as in the Welsh periphrastic form, *yr wyf wedi dysgu* 'I have learned,' more literally 'I am after learning;' *maent wedi eu gwerthu* 'they have been sold.' In the simple perfect also there are traces of similarity to Latin suffixes, as in *ceraist* 'thou hast loved,' *buaist* 'thou hast been.' The so-called pluperfect too in its final letters, like the Latin *scripseram* compared with *eram*, agrees most exactly with those of the Welsh tense which corresponds to *eram*.

In Gaelic the perfect tenses are formed with the preposition *air*, in power, possibly in form, the same as the W. *wedi*, precisely as imperfects are formed with the prep. *ag*. Thus *tha mi air bualadh* 'I am after striking,' i.e. 'I have struck;' *bha mi* — 'I had struck,' *bithidh mi* — 'I shall have struck,' from the vb. *buail* 'strike.'

In the Teutonic family the suffixes of the perfect seem to defy all analysis as regards what are called the strong verbs; but one common character with the perfects of the classical

languages and Sanskrit is seen in the love of reduplicate formation in the oldest member, the Gothic, as *faltha* 'plico,' *faifalth*, *slêpa* 'dormio' *saislêp*, *greta* 'ploro' *gaigrot*, *skaida* 'separo' *skaiskaid*, where the reduplication instead of retaining the root-vowel, as is the case at times in Latin and Sanskrit, invariably gives preference to *ai* corresponding to the *e* of *tetuli* *γεγραφα*; and again the first alone of two initial consonants is repeated except in the case of *sp*, *sk*, *st*.

Again as the long vowel of *egi*, *feci*, *ueni* grew out of reduplication, so in Gothic also a mere change of vowel was probably the result of a vanishing reduplication, and the same applies to our own *sang*, *drove*, etc. Probably the reason why the final suffixes of the perfect tenses in these languages have practically disappeared is that the reduplicated form and the change of vowel, which resulted from earlier reduplication, served in themselves to mark the character of the tense, though not originally employed for this purpose, and so led to the loss of what had become superfluous, just as was the case with the plural *men*, *geese*.

The course adopted with so-called weak verbs is of a wholly different nature. If we start from our own language we find such verbs ending in a *d* or *t*, as *loved*, *wept*; and of these the *d* is no doubt the original form, which in such a combination as the *pt* of *wept* naturally adapted itself to the preceding *tenuis*. But to understand the true meaning of this *d* we must go back to the Anglo-Saxon and then to the Gothic. Now the suffixes in these two languages are as follows in Grimm, vol. i. pp. 840 and 845, 895 and 903:—

	STRONG VERBS.			WEAK VERBS.		
Gothic	S. 1 —	2 -t	3 —	1 -da	2 -dês	3 -da
	D. 1 —	2 -uts	3 —	1 —	2 -dêduts	3 —
	P. 1 -um	2 -nþ	3 -un	1 -dêdum	2 -dêdunþ	3 -dêdun
A.-Sax.	S. 1 —	2 -e	3 —	1 -de	2 -dest	3 -de
	P. 1 -on	2 -on	3 -on	1 -don	2 -don	3 -don

Thus in the A.-Sax. what distinguishes the weak verb from the strong verb is the possession of *d* or *de*, so that our *loved* must have had an older form *lorde* or *lovede*; but the dual and plural

of the Gothic supply yet another letter, giving us *love-ded*, which *ded* bears so strong a resemblance to our verb *did*, as Grimm observes, that one is tempted to ask whether *I love ded* is not really one with our periphrastic perfect *I did love*; and I think the answer must be in the affirmative. The perfect *did*, in that it ends with a *d*, seems at first to give support to the idea that it was itself formed upon the same model as the perfects of weak verbs. But if so, the whole theory would fail from an inherent weakness, for then *did* would represent *do + did*; this again *do + do + did*, and so on in an infinite series. But Grimm suggests an answer to this difficulty in that *did* may well be itself a reduplicate perfect like those of the strong verbs; and further reflection will go far to support this view. The perfect participle *done* is alone a powerful witness to this claim. If we look at the so-called irregular verbs of the German language as now existing, we shall find that the whole number is about 186, made up of 14, which have a perfect participle in *t* and a preterite in *te*, as *bring-en brach-te ge-brach-t*; while 171 have their participle in *en*, and of these not one forms its preterite in *te*. The remaining one is *thun*, pret. *that*, part. *ge-than*. Thus if *that* be a reduplicate perfect, this verb may fairly claim to rank with the strong verbs. But the so-called strong verbs belong to the older stock of verbs, playing in the German vocabulary the same part which belongs to the consonant-verbs of the Latin language. On the other hand the weak verbs go with the secondary or derived verbs of the Latin language which constitute the first, second, and fourth conjugations, besides some others. But the verb *thun* and its representatives not only belong to the older class, but among these hold a distinguished place. It is one of the very few verbs which have most truly preserved the pronominal suffix in the singular of the indicative. Thus the old German (D. G. 1, p. 885) has *tuom tuos tuot*, and the old Saxon (p. 894) *dón* or *dóm*, *dós*, *dód* or *dót*. A similar mark of antiquity is seen in the Latin presents, *sum*, *inquam*, and let me add *sciam*, as used in some phrases, with the power of *scio*. It might perhaps be argued on the other hand that the perfects of this verb in the several Teutonic

branches connect themselves specially with the weak verbs, by their personal endings. Thus for old German the preterite ends for strong verbs: S. 1 —, 2 -i, 3 —; Pl. 1 -umēs, 2 -ut, 3 -un; but for weak verbs: S. 1 -ta, 2 -tós, 3 -ta; Pl. 1 -tumēs, 2 -tut, 3 -tun; while the preterite of *tuen* 'facere' for the singular runs: 1 *tēta*; 2 *táti*, 3 *tēta*; thus agreeing in the first and third persons with the endings of the weak verbs. Again in the old Saxon (pp. 887 and 890) the endings are for strong verbs: S. 1 —, 2 -i, 3 —; Pl. 1, 2, 3 -un; but for weak verbs 1 -da, 2 -dos or -des, 3 -da; Pl. 1, 2, 3 -dun. On the other hand for the vb. *duan* the sing. of the perf. is: *deda dēdos dēda*. Thus it must be admitted that the suffixes of the perfect in this verb have marked affinities with those of the perfects of weak verbs; but on reflection this fact will be found in favour of the present theory, and as Grimm observes, in p. 885, is one which "hohes Alterthum verräth." If the ^{preterite} weak verbs were actually formed by affixing an auxiliary such as our *did*, then all the peculiarities in termination of that verb would naturally go with it; and that such representative of our *did* should be possessed of fuller suffixes than the other strong perfects, is only another proof that this verb stands above the rest in antiquity. Lastly the identity of the English preterite *did*, to take that as a type of the Teutonic verb in question, with the Latin *ded-i* alike in form and power, serves to strengthen the present argument. I have said in power, feeling that 'to put' or 'cause to be' (in any place) is the original meaning of both verbs, as in our own compounds *d'on* 'put on,' *d'off* 'put off,' *d'out* or *douse* 'put out,' *d'up* (the chamber door) 'put up.' So in German we find *ab-thun* 'put away,' *an-thun* 'put on,' *auf-thun* 'put up,' 'open,' *aus-thun* 'd'off,' *ein-thun* 'put in,' *hin-thun* 'put away,' *um-thun* 'put round,' *weg-thun* 'put away,' *zu-thun* (die Augen) 'put to,' 'shut.' So again in Latin we find the best translations of the compounds of *dare* are found in the same way, as *ab-do* 'put away,' *ad-do* 'put to,' *con-do* 'put together,' *de-do* (arma) 'lay down,' *di-do* 'distribute,' *ē-do* 'put out,' 'utter,' *in-do* 'put on,' *ob-do* (pessulum) 'put to,' *pro-do* 'put down,' 'abandon,' *red-do* 'put back,' *sub-do* (calcar) 'put up,' *trans-do* 'hand over;'

and lastly, no better proof of the identity of the German *thun*, our *do*, and the Latin *da-* can be found than in the strange power given by the same preposition to *ver-thun*, *for-do*, and *per-do*. So *in-du-o*, while it retains the simple vb. in its earlier form with a vowel *u*, also supports the same view in its translation 'put on.' I am aware that Sanskritists refer the *do* of the Latin compounds here quoted to the S. *da-dha-mi* and the Greek *τιθημι*. But the *θεσ-* which constitutes the base of this Greek verb appears in Latin as *ser-*, whence *insero* 'put in,' 'insert,' *exsero* 'put out.' And on the other hand it requires some courage to contend that *dare* with its strange subjunctive *duim* of archaic Latin, has no connection with *perdere* which also has an old subj. *perduim*, just as a similar subj. *creduim* goes with the compound *cre-do cre-didi*. Note too that this *u* again shows itself in the old G. *tuom tuos*, etc. just quoted; in the old Sax. vb. *du-an*, in the Platt-Deutsch *dualm-en*, and in the sound given to the vowel *o* in our own *do* and *done*. Lastly if *du-ātus* be an older form of *dātus*, we see an explanation of the short penult.

So much for the perfect tenses in Latin, Greek, etc. The perfect participle in Latin takes *it* for the most part as its distinguishing suffix, as in *al-it-us*, for the final syllable *us* need not be discussed at present. Now this very same form *it* is also found in the old Lowland Scotch dialect of our own tongue, viz. *abas-it*, where we should say *abased*; and this systematically. Of course this must be only a variety of our own *ed*, as seen in the participle *loved*. But then our strong verbs, as in the Teutonic family generally, possess a suffix *en* of like power, or in some cases we must say once possessed. For *molten* we now say *melted*, for *cloven* *cleft*. But these two suffixes were no doubt in origin one, the two dentals *n* and *t* being freely interchangeable. Thus in Greek from *έν-* 'one' comes a comparative *έτ-ερος* 'one of two.' So *ευπτεν* has no doubt superseded a form *ευπτετ*, as shown by the reflective *ευπτετ-ο*. In the Danish again *en* and *et* serve in different genders for an indefinite article before nouns; and forms of the very shape, but wholly different origin, when suffixed to a noun do duty as definite articles, as *patriot-en*

'the patriot,' *dag-blad-et* 'the day-leaf' or 'journal.' But as *en* in our perfect participle is limited to the so-called strong or older verbs, it has a clear claim to precedence over the other variety. Now this form *en* is a favourite suffix of genitives (see below), and this is the very power which, as we have seen, is well suited for the explanation of what grammarians mean by perfect.

In Welsh again we find a form which agrees well with our *lov-ed*, viz. *car-ed-ig* 'loved,' the final *ig* of which is reserved for future consideration. While the ordinary participles of this form in Latin belong to the passive voice, an active power is seen to belong to those which go with the so-called deponent verbs, as *secutus*, *ratus*, etc. ; and indeed with some others, as *cenatus*, *adultus*. So too conversely *comitatus*, *emensus*, and several others, although connected with deponents, often assume a passive sense. But this twofold power, as already stated, is no way inconsistent with the origin of the form.

In the Greek $\tau\epsilon\rho\nu\phi\text{-}\omega\varsigma$ the last syllable of the crude form may well be *ov*, passing in the oblique cases to *or*, so that the *ov* and *or* would again correspond to the *en* and *it* of our own language.

CHAPTER XIV.

SECONDARY VERBS.

THE verbs in *ασσω εσσω*, etc., which for the most part go with verbs in *αττω*, etc., were the subject of a somewhat detailed discussion in the chapter on Vowel-Assimilation. We have now more especially to deal with the meaning of this suffix; but a word or two may be useful as a preliminary with regard to the sounds expressed by the combination *σσ*, *ττ*. An enquiry of this kind in reference to a dead language has its difficulties and doubts; but I am inclined to the belief that *σσ* was an equivalent for our E. *sh*, and *ττ* for our E. *ch*; and one reason for this belief is the consideration that such a sound was not likely to be wanting to the Greeks; and again the idea receives some support from another belief, that *λλ* was an equivalent for *λ*, much as is the case with the French *meilleur*, *billard*, etc. Bopp in his V. G. (§§ 749 and 769) is inclined to the opinion that *αλλος βαλλω στελλω* grew out of the forms *αλιος βαλιω στελιω*, referring in the case of the first to L. *alio*-, Goth. *alja*-, S. *anya*-. Φλλον by the side of *folium* may be added to these, and above all *μᾶλλον*, which as a comparative claims the form and sound of *μάλ-ιον*, while the circumflex accent also points to a 'mouillé' pronunciation *mā-yon*; and here we may compare *Mallorca* = *Maiorca*. *Κρεισσων κρειπτων*, *θασσων θαττων*, *βρασσων*, *μασσων*, and indeed *μειζων*, confirm the view. Further the Poles employ the digraphs *sz* and *cz* as symbols equivalent to our *sh* and *ch*. So the familiar name *Kossuth* is pronounced as though written *Koshut*. It is on this principle perhaps that we may explain the habit of such verbs as *facesso capesso* to form their

perfects and participles after the fourth conjugation, for there seems to be some affinity between the so-called palatals *sh*, etc., and the vowel *i*. If this be admitted *χαπαττ-ω* would closely approach in sound as well as meaning to our *s-car-atch*; and Bopp (§ 772) quotes a vb. *θανασσω* as representing a theoretic *θανατ'-ω*. But this may be left an open question without much damage to what follows.

The theme of *ταρ-ασσω* (I take this rather than *χαρασσω* because of the simpler form of the root) is *ταρ-αχ-* as shown by the substantive *ταρ-αχ-η*, and the aspirate of the suffix *αχ* agrees with what is seen in *ορ-υχ-η* by the side of *ορυσσω*. Again *μειλισσω* has by its side an adj. *μειλιχος*. On the other hand *μαλακος* goes with *μαλασσω*, *φυλακη* with *φυλασσω*, *φαρμακον* with *φαρμασσω*, which point to a *κ* rather than *χ*; and lastly *π(α)λησσω* with *επλαγγν*, so as to give a preference to the thick guttural. I am therefore free from the charge of violence when I compare our suffix with the Keltic suffix *agh*, as seen for example in Manx. This, says Leo in the Manx Grammar contained in his 'Ferien-schriften' (pp. 174, 180, etc.), is a suffix that is adapted at pleasure to any Manx verb to form a 'modus consuetudinalis,' or what Latin and Greek grammarians would rather call a frequentative verb. Thus *moyll me* 'I praise,' *moyllagh me* 'I habitually praise,' *ooashl me* 'I honour,' *ooashl-agh me* 'I habitually honour.' An interesting example of such a Manx verb is *be-agh*, which usually means 'live;' but in Genesis iii. 18 is translated by 'eat:' "Thorns and thistles shall [the ground] bring forth to thee; and thou shalt eat the herb of the field," that is, for all time.

The Irish too has its class of verbs in *aigh-im*, which may also be regarded as frequentatives, and in fact correspond to the Manx verbs in *agh*. But is the notion of a frequentative felt in the Greek verbs? It seems to me that such is in fact the case. The verbs just quoted, *ταρασσω*, *χαρασσω*, *ορυσσω*, do speak of acts which have that character; and let me add *αιθυσσω* as used of the 'quivering, flickering' of leaves; also *ερεσσω*, *εΐλισσω*; and the further we proceed in our enquiry, the more numerous, the more convincing will be the examples.

At the same time we have to answer another question: Is the suffix well adapted for the office so assigned to it? Here also I have no hesitation in giving an affirmative answer. This suffix differs but slightly from the *ακ, αγ,* etc., which serve to characterize diminutival nouns; and in our own language we have a perfectly parallel case of an undoubted diminutival suffix employed for the very purpose of denoting frequentative verbs. In the grammar which Dr. Johnson prefixed to his great dictionary I find the words: "If there be an *l*, as in *jingle, tingle, mingle, sprinkle, twinkle*, there is implied a frequency or iteration of small acts." Again in the Finn language the same idea is habitually expressed in the very same way, as *lask-en* 'dimittere,' *lask-el-en* 'paulatim dimittere,' an example by the way which alike in root and suffixes is calculated to allay the doubts of those who cannot bring themselves to believe that there is any connection between this outlying language and the Indo-European stock.

In grammars of the Slavonic languages one of the first dealings with verbs is to divide them into two classes; momentary verbs which speak of a single act, and continuous verbs. And under the term continuous I include the two ideas of iteration and a permanent state whether of mind or body, so that under this second head fall the ideas 'lie, stand, have, know, fear, love,' etc. It were well if our grammars of the classical languages followed them in this respect, for there must be in Greek and Latin the same natural distinction, which indeed is inherent in language; for who can fail to see an aggregate of petty acts in *walking, following, swimming, drawing, rubbing, growing, breathing, talking, writing*?

But let us pass from Greek to other languages in search of words with a suffix corresponding to the Greek *αχ*, etc. In Latin *plango* first presents itself, corresponding to *πλησσω*, and cut down from a fuller *pal-ango* which means 'strike with a flat surface,' as with the *pal-ma*: Thus a common application of the term is to the clapping of a bird's wings. The Latin language must at some time have had a verb with the theme *sl(o)rag*, corresponding to our *strow* (old form *straw*), from which *strag-ulus*

and *strag-es* are deduced; and *stramen* also, seeing that a *g* is apt to vanish before an *n*, as in *flamma* for *flagma*, *examen* for *exagmen*. An *o* has been just assigned to *st(o)rag-* on the evidence of *στορ-ειν-νμ*; or an *a* might have been preferred, as sanctioned by the *S. star*. *Frango*, with its analogue *ρήγννμ* and *E. break*, is not a simple verb, but a secondary form growing out of a fuller *for-aug-* or *for-ag-*, and so intimately connected, perhaps I might rather say one with, *forare*, of which the root is *for* = *E. bore*; as also *fod* of *fodere*, *r* and *d* ever readily interchanging in Latin. That 'piercing' was the earlier meaning of our *break* was noticed above (p. 120); and I may here add that the Lith. vb. *brėkszta*, as used of the 'break of day,' confirms what was there said.

The verb *trah-o*, which has preserved the aspirate (= *G. trag-en*), I claim as representing a form *tol-agh-o*, i. e., a secondary verb from *tollo*; for its earlier meaning, like that of the German verb, was rather to 'bear' than to 'drag,' so that the two phrases of Horace, "indocili iugum collo trahentes" and "ferre iugum dolosi" agree with each other; and if a doubt be still left, it may be removed by the consideration of the phrases "tractare arma," Hor., and "tractare personam" or "partes secundas," Cic. It is from this assumed secondary vb. *tol-agh* or *tol-ach* that the participle *latus* was formed for the use of *fero*. Compare too the analogue *τλητος* from *τλημι* with the sb. *τολμη* and adj. *ταλας*.

Traces are also to be found of the suffix in the form *ac*. Thus *grac-ilis* as compared with *ut-ilis* points to a verb *grac-* or rather *ger-ac-*, corresponding to our own *grow*, whence *gramen* and perhaps *gratus* (ripe?); while the cognate *germen* comes directly from the simple verb, already lost to the Romans. *Alac-er* again implies, I think, as I have already said, a secondary verb *al-ac-*, akin to *ἀλλομαι* and *sal* of *salio* (*saltus*). *Laxus*, again, with our own *slack*, seem together to imply a secondary *sol-ac-*, one with *solu-* of *soluere*. Of the same stock are the nouns *luxus*, *luxuria*. Still more indisputable evidence is seen in the eighteen neuter nouns in *ulo-* ('*ro-*): *subligac-ulum*, *piac-ulum*, *cenac-ulum*, *propugnac-ulum*, *gubernac-ulum*, *mirac-ulum*, *spirac-ulum*, *orac-ulum*, *augurac-ulum*, *obiectac-ulum*, *spectac-ulum*, *crepitac-ulum*, *hospitac-ulum*, *sustentac-ulum*, *receptac-ulum*, *ambulac-rum*, *simulac-*

rum, *lavac-rum*; the last three of which prefer an *r*, like *puellaris*, *familiaris*, simply because of the preceding *l*. And with these we may include *solac-ium*, for here a *c* is now admitted to be the genuine letter.

As adjectives are used to denote a continued state of things, our suffix is well calculated to serve as a suffix to them; and so I welcome the fact that in Manx "bei weitem die Mehrzal aller Adjectiva ist so gebildet," as *myghin* 'pity,' *myghin-agh* 'merciful,' *pooar* 'might,' *pooar-agh* 'mighty,' *graih* 'love,' *grai-agh* 'pleasing.' Here again we find an explanation of the L. adjj. *edax*, *ferax*, etc., and *ferox*, and of the Gr. *μαλακος*, *μελιχος*, etc.; as also of the G. *mächtig*, *durstig*, etc. Add thereto the W. adjectives in *ac*, *og*, *ig*; the Breton in *ek*, and so on.

Further as the final guttural in diminutival substantives habitually vanished, so also the γ of the suffix in Gr. verbs at times vanishes. Thus $\gamma\epsilon\lambda\alpha\omega$ (see p. 137) had strictly $\gamma\epsilon\lambda\alpha\gamma$ for its theme; and $\theta\lambda\alpha\omega$ 'crush' also stands for $\theta\lambda\alpha\gamma\omega$, as shown by the part. $\tau\epsilon\theta\lambda\alpha\gamma\mu\epsilon\nu\omicron\varsigma$. Of this verb it seems probable that $\phi\lambda\alpha\omega$ is the more genuine form, and this a compression from $\mu\alpha\lambda\alpha\omega$, so that the word would be only a variety of $\mu\alpha\lambda\alpha\sigma\sigma\omega$, the letters *l* and *r* often converting an immediately preceding consonant into an aspirate, as in $\theta\rho\alpha\sigma\sigma\omega$ for $\tau\alpha\rho\alpha\sigma\sigma\omega$. The loss of our *g* is seen too in *strauī*, *stratus*, which accordingly take the character which usually marks the first conjugation.

I venture then to claim the whole body of Sanskrit verbs which Sanskritists assign to their 10th class, viz., those with a suffix *ay*, and called by them causal verbs; and this the more that a *y*-sound often marks the transition of a *g* between vowels on its way to annihilation. In my Essays, p. 263, I drew attention to the fact that in Prof. Wilson's list of fifty-six verbs of this conjugation at the utmost one in five contains the idea 'to make,' the first ten of them being translated by himself as 'steal, disrespect, hurt, send, wink, speak, play, be feeble, be able, sound.' 'To send' may of course be expressed by 'cause to go;' but it would be difficult to find a causative idea in most, perhaps in all of the others. Bopp himself too (§ 772) speaks of a whole class of S. verbs which with causal suffix have no

causal meaning, as *aṣṭvāyāmi* 'equos cupio,' *patiyāmi* 'ich wünsche zum Gatten;' nay (§ 109^a, 6; vol. i. p. 225) he admits generally that the 10th class contains many verbs which possess the causal suffix, but without the causal meaning; and he himself quotes the example *kāmāyati* 'er liebt,' i.e. a verb of the very power I am claiming.

But as Sanskritists so generally agree in the doctrine that a causal notion resides in the suffix *ay*, the present opposition to this theory will not be likely to win assent, unless the error, if it be an error, be first accounted for; for I think it is Coleridge who judiciously warns an enquirer, when desirous to extirpate what he believes to be wrong in the conceptions of others, to trace the error to its origin. Now the mimetic theory finds its justification whether the natural sound which is supposed to be the foundation of a word be directly or indirectly the result of the agent's action. At any rate a large class of verbs in language denote both ideas. The Latin *verto*, *ruo* (*proruo*, *diruo*), *moueo*, at one time express the ideas 'cause to turn, to rush, to move;' at others have the power of reflective or intransitive verbs, 'turn, rush, move.' The same double power belongs to our own verbs *turn*, *move*, *change*, *pour*. To *fly*, *walk*, *run*, *wake*, are commonly intransitive verbs; but we are familiar with the phrases '*fly* a kite,' '*walk* a horse,' '*run* a wall,' '*wake* a baby.' The Latin *stare* is intransitive, but *praestare*, as with *virtutem*, often transitive. We are taught that we ought to say '*fell* a tree,' but in our provinces we still often hear '*fall* a tree.'

Again, when a verb is formed from a noun, whether adjective or substantive, the idea 'making' comes in almost as a matter of course; but without any special suffix to denote the idea, as *albus* 'white' *albare*, *δουλος* *δουλοειν*, *Graecari*, *ancillari*; but as the action in such cases is of a repetitive character, a suffix which denotes iteration or permanence would not be out of place.

But I call Bopp as a witness against himself. In § 109^a, 6 (vol. i. p. 226), he claims as representatives in form of his 10th class or causal verbs the three vowel-conjugations in Latin, i.e., the *a*, *e*, and *i* verbs, the three vowel-conjugations in Greek, besides some others; and the so-called weak verbs of the German

stock. But when he proceeds to deal with special instances, he is not very successful. As regards the three L. verbs *sedare*, *monere*, *sopire*, he finds no doubt what he wants; but that his dealings with *doceo*, *facio*, *iacio*, *rapio*, are not very happy, I have endeavoured to show in the Essays, p. 264. But he himself is conscious that the causal power is found only exceptionally in the Latin and German vocabularies, as appears in the closing remarks of his § 750, where he first tells us, that in the Georgian dialect of the Caucasus the causal-suffix of the Sanskrit has its representative in certain specified forms, yet the causal power is wanting; and he adds that there is nothing strange in this, seeing that in Latin and German too, so far as regards the vowel verbs of the former and the weak verbs of the latter, the suffix in question has so completely got the upper hand as to cover the whole ground; where the implication is that here also the causal power is often wanting.

In Bopp's view, that the vowel verbs of Greek, Latin, and German have a suffix in common with the so-called causal verbs of Sanskrit, I cordially acquiesce, so soon as the suffix in question is allowed to be a representative of 'paulatim,' and so fitted for the use of iterative or continuous verbs.

What has been said of $\theta\lambda\alpha\omega$ and $\gamma\epsilon\lambda\alpha\omega$ as having for their theme forms like $\theta\lambda\alpha\gamma$ - and $\gamma\epsilon\lambda\alpha\gamma$, and still more the list of neuter nouns, *subligaculum*, etc., together with *uor-ag-on-* by the side of *uor-a-re*, and *im-ag-on-* (as pointing to a simple *im-ari* of which *imitari* is the familiar frequentative), are a sufficient introduction to the assertion that all the *a*-verbs of Latin have lost a final guttural, just as the *a*-nouns have. *Verec-undus*, backed as it is by our own *fr-igh-t* by the side of *fear*, points to an older stem *uer-ec-*, as preceding the later *uer-e-* of *uer-eor*, while *ueritus* is more truly the participle of the lost simple verb. *Reor*, as having superseded a theoretic *ear-e-or* (p. 132), is also open to the suspicion of a lost guttural, when we have before us the W. *careg*, L. *cale-*, and E. *reck*, *reckon*. *Frētus* in all probability represents a lost *fer-ec-tus* (cf. *dumetum*, etc., of p. 67), so that we have in *fer-ec* a secondary verb from *fer-o*, corresponding to our own *br-ing*, *br-ough-t* (G.

br-ach-tc), from *bear*. So *spretus* and *crcetus* (*secretus*) seem to imply older varieties, *sper-ec-tus*, *cer-ec-tus*. *Prurig-o*, *or-ig-o*, *esurig-o* have preserved the *g* which is lost in *prurio*, *orior*, *esurio*; and if, as was contended above, the nouns *tussi-*, *fini-*, *uesti-*, etc., have lost a final guttural, we have no reason for surprise that the verbs of the same form have met with the same fate. The same argument applies to such verbs in *u* as *metu-o*, *acu-o*; while *uol-uc-ris* seems to tell us that *uola-* of *uolare* has superseded a form *uoluc-* or *uolac-*; and *in-uol-uc-rum* suggests a guttural ending for *uolu-* 'roll,' such as *uoluc-* or *uolug-*, corresponding to our own *wall-ow*. (Cf. too Ital. *uolgere*.)

Fluctus, again, and *fructus*, *fruges*, justify us in attaching a final guttural to *flu* of *fluo* and *fru-* of *fruor*; and here again support is found in the E. *flow*, and G. *brauchen*, E. *brook*.

Not to be lost sight of are those L. verbs which have reduced the suffix to a mere *g*, as *mergo*, *spargo*, *tergo*, and the two verbs *uergo* 'incline,' akin to *uerto*, and *uergo* 'pour,' akin to S. *vari* 'water'; to which correspond our own verbs ending in *k*, as *talk*, *walk*, *hark*, *lurk*, *bark*.

But let us stop a while to ask ourselves whether the iterative or continuous ideas fit in with the vowel verbs; and I find iteration well marked in *mic-a*, *fric-a*, *crepa-*, *laua-*, *spira-*, *ara-*; and continuity or state in *sta-*, *cuba-*, *ama-*; similarly iteration in *ride-*, *fle-*, *sorbe-*, *tonde-*, *doce-*, *cense-*; state in *habe-*, *iace-*, *tace-*, *uide-*, *ole-*; iteration in *meti-*, *sarci-*, *farci-*; state in *sci-*, *audi-*, *senti-*; and the distinction comes out better by contrast, as when we compare *cumb-ĕre* with *cub-āre*, *si-s(e)t-ĕre* with *st-ā-re*, *sid-ĕre* with *sed-ĕre*, *iāc-ĕre* with *iāc-ĕre*, *pend-ĕre* with *pend-ĕre*, *tend-ĕre* with *ten-ĕre*, *di-uid-ĕre* with *uid-ĕre*. It should be noted also that the suffix in question is more fitted for the imperfect than the perfect tenses, and accordingly we find *micui*, *fricui*, etc., preferred in the irregular and so older verbs of the *a*-class. In the *e*-verbs this *e* rarely appears in perfects; and the same principle accounts for *uinxi* and *uinctus*, *sarsi* and *sartus*, beside *uincio*, *sarcio*, and so on.

I go back to the Greek suffix $\alpha\chi$, $\alpha\gamma$, $\alpha\kappa$, etc., to follow certain

letter changes. Greek aspirates habitually interchange; and thus I find by the side of $\chi\alpha\rho\text{-}\alpha\sigma\sigma\text{-}$ ($\alpha\chi$) a variety $\chi(a)\rho\text{-}\alpha\phi\text{-}\omega$, and with the usual vowel change, ($\sigma\sigma$) $\rho\text{-}\phi\text{-}\epsilon\omega$, $\epsilon\rho\text{-}\epsilon\phi\text{-}\omega$; but a Greek ϕ has habitually a L. *b* for its representative, and so we come across *sc(e)r-ib-o* (*scrib-*) and *tr-ib-ulum* (cf. $\tau\rho\text{-}\tilde{\iota}\beta\text{-}$) by the side of *tĕro*, with *er-ib-* of *crib-rum* by the side of *cer-no* and $\kappa\rho\text{-}\iota\text{-}\omega$; so too *lat-e-o* *lat-eb-ra*, *seat-e-o* *seat-eb-ra*; and as I adduced *gr-ac-ilis* before, so now I adduce *fl-eb-ilis*, *ex-pl-eb-ilis*, *g(o)n-ob-ilis*, *sol-ub-ilis*, *uol-ub-ilis*, *lug-ub-ris*, and above all such forms as *laud-ab-ilis*, with the 400 words of identical termination; and then the tolerably strong corps of neuter nouns represented by *uoc-ab-ulum*, together with *dol-ab-ra*, *ter-eb-ra*, *sal-eb-ra*. Still more valuable witnesses are the quasi-participles, not a few in number, of which *contion-ab-undus* (over sixty of these), *gem-eb-undus*, *rid-ib-undus*, may be taken as types; the more valuable, I say, as they carry with them so marked a sense of iteration. This variety of the suffix has its counterpart, as Bopp observes (§ 750), in the Georgian *ab*, *eb*, *ob*, softened also into *aw*, *ew*, *ow*.

In a few instances a *p* is found in place of a *b*, especially where the vowel of the suffix has disappeared, as in *carpo*, *scalpo*, *serpo*, $\acute{\epsilon}\rho\pi\omega$. But again the Sanskritists come forward to claim this *p* as of causal power. The words however themselves pronounce at once in favour of the claim for iteration by their meanings ‘nibble’^{diu} and ‘creep.’ The stem of *carpo* is seen perhaps in $\kappa\epsilon\rho$ of $\kappa\epsilon\rho\omega$ and *car* of *caro* (*carnis*); while *serp* = S. *sar-p*, the simple form of which is preserved in S. in the form *sar* or *sri* ‘go.’ The Gr. $\rho\text{-}\epsilon\pi\text{-}\omega$ is best explained by comparison with its equivalent the L. *uer-g-o*; and $\tau(\epsilon)\rho\text{-}\epsilon\pi\omega$ of course belongs to the family $\tau\epsilon\rho\text{-}$ or *ter-* ‘turn.’

Yet a more violent change, but one in keeping with what was said of the suffixes of diminutival substantives. As I claimed *um* in L. *bellum*, and *om* in E. *bottom*, as of guttural origin, so now with increasing confidence I claim for iterative verbs a suffix $\epsilon\mu$, as passing from a guttural $\alpha\gamma$ through a nasalized *av*. First of all I quote $\beta\rho\text{-}\epsilon\mu\text{-}$, $\beta\rho\text{-}\alpha\chi\text{-}$, $\beta\rho\text{-}\nu\chi\text{-}$ in the sense of ‘roar,’ corresponding on the one side to L. *fremo*, on the other to E. *bellow* and *bark*, as all varieties of the same word. Secondly,

I point to *τρεχω*, with *εδραμον* and *δρομος*. It has already been noticed that before an *ρ* and *λ* consonants readily interchange; thus *γλυκς* is no doubt one with *dulcis*, of which the *d* is probably more genuine. *Glans* again is of course one with *βαλανος*, and so on. I am inclined to believe then that the Gr. *τρεχω* has superseded a *κρ-εχ-ω*, so that it is one with *curr-ic* of *curr-ic-ulum*. The change of the initial consonant has its exact parallel in the L. *trĕmo*, which has grown out of a lost *crĕmo*, for *cer-em-o*, the root of which survives in *καρ-καρ-* of *καρκαίρω* 'tremble,' in *cor-uscus* and the phrase *querquera febris* 'ague.' Nay, a provincial *crémir* in French still exists with the same idea; and the familiar *craindre* is of the same stock, the change of consonants being the same as in the obsolete *aveindere* 'take down,' from the equally obsolete L. *ab-emere*. Similarly there seems strong reason for believing in the affinity of L. *cremare* and *πιμπρημι*, of *trans* and *περαν*; and for treating the L. *tranquillus* as representing a more genuine *planquillus*, a double diminutive of *plancus*, and that itself a dim. of *planus*. The L. *premo* I also believe to be a secondary verb with the same iterative suffix, which is not ill placed; and I connect therewith the so-called adj. *frequens*, and perhaps *cr-em-or* 'thick juice,' and *cr-eb-er* 'crowded;' nay even *cru-or* 'clotted blood.' Thus the root syllable may possibly be the same as in *cel-eb-cr*, *gel-u*, *κρ-υστ-αλλος*, etc., and *clot* itself.

Once more I go back to our starting-point to claim yet another class of verbs, viz., those in *ασκω*, *εσκω*, etc., as well as the Latin verbs like *labasco*, *rubesco*, *seisco*, etc. In these we find a considerable variety of meaning, as iteratives, imperfects, and, as some hold, inchoatives; but of these the notion of iteration seems to have had precedence in time; and in this way I would account for the fact that the Ionic, *i.e.*, the oldest, writers, abound in this use of such verbs. Buttmann I am aware sets apart as of totally different origin the Ionic iteratives in *σκον* (§ 112, Anm. 11), but I do not see the force of his arguments; and indeed he himself (in § 94, Anm. 3, note) quotes from Herodotus a passage where he admits that *ἄρδεσκε* has simply the force of the past imperfect *ἤρδε*. The same writer points out that verbs with the suffix *σκω* occasionally carry with them the

causative notion, giving the examples *μεθίσκω* 'mache trunk n,' and *πιπίσκω* from *πίνω* *ἔπιον*; but of course this is not the primitive notion of the suffix. Other examples are *διδασκω* (for *δι-δακ-σκω*) and *μι-μ(ε)ν-ησκω*. But if we claim these verbs in *esco*, etc., as in origin one with those in *esso*, how are we to account for the presence of the guttural; and the same difficulty presented itself to Bopp in his view of the subject (§ 751), and he finds a solution in the assumption that the *κ* of *βιβρωσκω*, etc., is merely "ein euphonischer Begleiter des Zischlauts;" that is probably what I denote as an excrescent letter or outgrowth from the sibilant. At any rate there is a close affinity between the two letters; and accordingly we find *finiscono* of Italian taking the shape of *finissent* in French; and again, if the theory that the Greek combination *σσ* represented the E. sound of *sh*, we have abundant examples of the interchange in question, as *shell* and *scallop*, *ship* and *skipper*, *shot* and *scot*, to say nothing of E. *school* by the side of the G. *schule*, etc. Nay our own *finish* stands in this relation to the Ital. *finisco*.

Yet another claim. The suffix of such verbs as *αντιαζω*, *ῥέζω* (for *ῥερ-εζω*), *λογιζω*, *ἄρμοζω*, *ολολυζω*, seems inseparable from what have already been claimed. Thus Buttman identifies *αντιαζω* and *αντιαω* (§ 112, 10); *ἄρμοττω* is a variety of *ἄρμοζω*, and so on. No doubt the prevalent doctrine is to treat the *ζ* of these forms as growing out of a *δ* rather than a *γ*, yet the latter constantly presents itself, as in *ῥέξω*, *ἄρμογη*, *ολολυξω*, *ολολυγμος*; and this especially in the Doric dialect, as *αντιαξω*, *κομιξω*. But this is the very dialect which deserves our first attention, as generally of conservative habit. Moreover the passage of a *g* to a *d* through an intermediate *gd*, or even directly, is not of very rare occurrence.

In the treatment of diminutival substantives suffixes with a liquid came under consideration; and here again we find forms in this shape playing an important part in the formation of secondary verbs, and again, as already noticed, so as often to introduce the idea 'paucalim,' as *gamble* or *gambol* from *game*, *ramble* from *roam*, *tickle* from *touch*; again, *quiver* and *shiver* from *quake* and *shake*, *waver* from *wave*; *listen*, *hearken*, *own*, *reckon*;

and here once more causatives turn up, especially in denominative verbs, as *darken*, *lighten*, *widen*, *blacken*, *shorten*. Yet the *en* was not needed to create a causative, as we say 'to *black* shoes' without any such suffix. In Lithuanian a suffix *in* is of frequent occurrence, and again often used of causatives, as *kab-u* 'hangen,' *kab-in-u* 'hängen,' *gér-as* 'gnt,' *ger-in-u* 'bessern,' *graž-us* 'schön,' *graž-in-u* 'schön machen,' *māl-u* 'Mehl mahlen,' *māl-in-u* 'mahlen lassen.'

In the Greek language a nasal liquid preponderates, as in *υανθ-αν-ω*, *ανξανω*, etc.; and with the loss of the vowel, *δακνω*, *τεμνω*, *καμνω*; and this *ν* is at times replaced by the dental aspirate, as in *φλεγεθω*, *ερεθω*, *πελαθω*, *φθινυθω*, as well as in the secondary forms implied in *ειργαθον*, *εικαθον*, *εσχεθον*.* In Latin again the suffix *in* in the form *in* appears in *'l-ino*, *'s-ino* (see pp. 123 and 128), and only the nasal is preserved in *po(s)no*, *cerno*, *sperno*, *sterno*. Nay the old form *danunt* = *dant* has grown out of a fuller *du-anunt*, of which *du* is the stem (see p. 163). But the Latin has also verbs in *il* with a clearly-denoted sense of 'paulatim,' as *sorb-il-are*, *uent-il-are*; or with two *l*'s, as *titillare*, *conscribillare*. To these add one instance of *el*, as *sepelio sepultus*, and a few with *er*, as *aperio apertus*, *operio opertus*, and *'s-ero* (see p. 128). So too a suffix *ερ* perhaps enters into the formation of *εγειρω*, *αγειρω*, *ιμειρω*.

But besides the forms already quoted for the Greek there are found verbs in which the *ν* is repeated, as *σκεδαννυμι*, *πεταννυμι*, *κρεμαννυμι*, *κορεννυμι*, *στορεννυμι*, *σβεννυμι*, *έννυμι*, *χρωννυμι*, *ζωννυμι*; and by the side of these there are perhaps always forms which in place of the liquids exhibit a sibilant, as *εσκεδασμαι*, *πετασμα*, *εσθης* (*uestis*), *ζωστηρ*; and thus a suspicion arises that in this *ανν*, *ενν*, etc., we have but a variety of *ασσ*, *εσσ*, of *ταρασσω*, etc.†; to which suspicion strength is added by the co-existing varieties *βασιλισσα* and *βασιλιννα*. It is however commonly taught, I believe, that in such verbs as the above the second *ν* with the following vowel *υ* constitute in themselves a suffix, and such verbs as *δεικνυμι*, *ζευγνυμι*, *ομνυμι*, etc., with *ολλυμι* as standing for

* These I find are called aorists, but I much doubt the propriety of this. † But not as regards *έννυμι*, *ζωννυμι*.

ολ-νμι are offered as evidence in favour of the doctrine; but I still doubt the theory. In the first place, in the cases of *ταννται*, *ταννω*, *ταννσχω*, which point to an old verb *ταννμι*, the *ν* can have no connection with the following vowel, as it is an essential element of the theme. The same holds good for *γαννται*, *γαννσχα*, and *γανω*, and for *κινντο*, *κιννμενον*, and *κινεω*. On the other hand a suffix *ν* shows itself in *ερνω* and *ελκνω*, corresponding to a like suffix in the L. *uoluo*, *soluo*, *feruo*, and our own *wallow*; whilst a *ν* without any trace of a following *ν* is seen in *δακνω*, *τεμνω*, *δαμνημι*. Hence I infer that in *δεικ-ν-ν-μι* and like verbs we have the accidental union of two independent suffixes, *αν* + *ν*.

Moreover this same suffix *ann* in the Erse plays the very part which I should expect, being the ordinary suffix of the consuetudinal present, so that with *molaim* 'I praise' we have *molann mé* 'I habitually praise.' So with the ordinary preterite *do mholas* there stands a consuetudinal preterite *do mholainn*; and again a second consuetudinal preterite, where the personal endings stand apart, *do mholadh mé*, etc. This aspirated suffix *adh* corresponds perhaps to the *aθ* of *εκαθω*, which I have already assumed to have grown out of an older *αν*. I am no way surprised to find from Leo's Irish Gr., p. 127, that in the north of Ireland this *adh* takes a nasal sound, which he represents by *unh*. But he adds, what is still more valuable for our enquiry, that in the south of Ireland it becomes *ach*, that is, the very sound from which we started; and thus there is good reason for believing that all the suffixes which have been brought forward in this chapter are of one origin in form, and possessed of the very power that I claimed, the idea of *paulatim*. Hence the forms *sterno*, *strages*, *stragulum* have in the suffixed *n* and suffixed *ag* two very dissimilar forms, which in spite of this are one in origin.

If the views here put forward be correct, we must reject the ordinary doctrine that forms like *αφασσω*, *ανυσσω*, and so on, are derivatives from *αφω*, *ανω*, etc.; the more correct doctrine being that *αφω* and *ανω* are themselves corrupted from the longer forms. Similarly from *labasco*, *ardesco*, *scisco*, or kindred

forms, were deduced *labo* (*labare*), *ardeo*, *scio*; while *triui*, *tritus*, have lost the *b*, which *tribulum*, like the Gr. *τριβω*, has preserved. So *gnosco* has retained two consonants, which are lost for *gnoui* and *gnotus*.

In the A.-Saxon the *a*-conjugation of Latin is represented by those verbs which Rask designates as constituting the first class of the first order, as *lufi-an* 'to love;' but the *a* shows itself only in the 2nd and 3rd persons of the ind. pres., as *lufast lufað*; or to take examples of his own, which are more instructive: *céarast* = *curas*, *céarað* = *curat*; *þolast* = *ταλας*, *þolað* = *ταλα*; *borast* = *foras*, *borað* = *forat*. Still more interesting is it to find that the *g* of the more genuine suffix *ag* crops up at times, as in ind. pres. 1st p. ic *lufige*; and pl. *lufiað* or *lufige*; also in the gerund *lufigenne* and part. act. *lufigende*; and an inf. *lufigan* is found by the side of the more favoured *lufian*. Rask indeed regards the *g* as no true part of the words, but inserted solely "according to a rule of orthography" between an *i* and *e*, to prevent that *i* from being pronounced as a consonant *y* (§§ 18 and 200). But after what has been seen, the more correct view is no doubt to claim it for our suffix *ag*. As the A.-Sax. pronunciation of the *g* in *lufige*, etc., is the same as of *y*, we have a confirmation of the theory that *ay*, the so-called causative suffix of the S. verb, represents an older *ag*.

So far I have taken no notice of those Latin verbs which are specially called frequentatives, and so might be expected to claim a position under the present head, as *clamito*, *agito*, *ducto*. These also I class with the verbs which have been under consideration; but I hold the earlier and more genuine termination to have been *ic-a-* rather than *it-a-*, so that we have here a reduplication of the suffix *ac*, *ica-* standing for *ic-ac*. Examples with a *c* rather than a *t* are *fodica-*, *uellica-*, *mulca-* 'pummel' from *möl-* 'pound' 'crush,' *frica-* and perhaps *mica-*. *Frica-* in my view stands for *thrica-*, as a frequentative of *tër-* 'rub,' the *t* first changed to *th* through the influence of the following *r*, just as *θρασσω* grew out of *ταρασσω*; and then a *th* passing into *f* according to the Roman habit, by which *feru-* 'boil,' with its derivatives, *fērũ-*

men,* *fěřmĭno*, and *fěř(ŷ)mentum*, are deduced from a lost *fer*, the analogue of the Gr. $\theta\epsilon\rho-$ ($\theta\epsilon\rho\omega$). So too *formus* = $\theta\epsilon\rho\mu\omicron\varsigma$; *foris* or rather *fora* (implied in the adverbs *foras*, *foris*) = $\theta\nu\rho\alpha$; *fer-a* = $\theta\eta\rho$; *fumus* = $\theta\nu\mu\omicron\varsigma$; while *fleo* is akin to $\theta\rho\eta\nu\omicron\varsigma$, *flos* to $\theta\alpha\lambda\lambda\omega$. In the great majority of Latin frequentative verbs the form *ĭta* prevails; but the change in my view was first occasioned by a desire to avoid the repetition of a guttural in those verbs whose simpler form already possessed a guttural, as for example the three quoted above, and over two hundred others; and subsequently employed where the excuse did not exist.†

* These forms with a single *r* are sanctioned by the best MSS.; and the short vowels agree with Plantus's usage, as in: *lăbră' labellis fěřmĭnat* (Glor. 4, 8, 25). See my paper printed with the Prospectus of University College, London, for 1872-3.

† Those well acquainted with the Slavic family of languages, would, I believe, find there much to confirm what has been said in this chapter. Thus I seem to recognize the suffix *ay* or *akh* with the very meaning here claimed in what Dobrowsky writes (Inst. p. 375): "*Praesens buivayu* (esse soleo) a frequentativo *buivati* singularis verbi *buiti* formatum est;" and again (p. 387): "*A zhivu* praeteritum singulare in composito *o-zhivu* est *o-zhi* revixit; si autem continuatam actionem designare velis, non *zhikh*, *zhi*, sed *zhivyakh*, *zhivyashe* (vivebam, vivebat) dicendum erit;" and yet again (p. 364): "*Terminatio brevior yu* actionem singularem, longior *ayu* actionem continuatam aut iteratam plerumque designat."

CHAPTER XV.

FORMATION OF TENSES RESUMED.

IF the subject of secondary verbs was taken in the last chapter somewhat out of its place, it was because some of the imperfect tenses in the Latin and Greek languages were believed to have been formed directly from verbs of this class. But, without anticipating any such result, let us commence this enquiry by looking at the Latin forms *amabam*, *tenebam*, *legebam*, *audiebam* on the one hand, and the futures *amabo*, *tenebo*, *legam*, *audiam* on the other.

The doctrine first put forward by Bopp, and subsequently adopted by many Sanskritists, is, that the first six of these forms, that is, those which exhibit a *b*, owe the syllable containing this letter, *bam* or *bo*, to the verb-substantive, as seen more or less changed in the forms *fui fore*, etc. Bopp's words, as translated into English, are: "The view that the Latin imperfects in *bam*, like the futures in *bo*, contain the subst.-verb; and indeed that form of the verb, whence *fui fore* and the obsolete conjunctive *fuam* are derived, was first published in my 'Conjugationssystem.' If it be conceded in general, that the origin of grammatical forms by means of composition is possible, then assuredly nothing is more natural than in the conjugation of attributive verbs to look for the entrance of the subst.-verb in order to express the 'copula,' or the union of the subject as denoted by the personal suffix with the 'predicate' as represented by the root-word." Professor Max Müller's words are: "*Bam* in *cantabam* was originally an independent auxiliary verb, the same which exists in the S. *bhavāmi* and in

the Ang.-Sax. *beom* 'I am'" ('Lectures,' p. 174). Again (p. 234) he says: "In the Latin *bo* of *amabo* we have the old auxiliary *bhū* 'to become.'"

It seems to me altogether fatal to this theory that the verb 'to be' should thus be employed for the very opposite duties of denoting the past and the future; and again, the introduction of a symbol for the representation of the 'copula' is of the less value, as it should on the same principle be inserted in the so-called present *fer-o* 'I bring,' but here we have no element whatever beyond the root-syllable and the pronominal suffix. But I have already protested against the intrusion of the logical line of thought into the first development of language.

To place *amabam* and *amabo* by the side of each other is instructive, if we will but proceed in gentler fashion. As the *m* of the first word and the *o* of the second have for their sole duty to denote the person, it follows that the one distinction between the two forms consists in the *a* of the past imperfect, to which alone therefore we must look for any symbol of past time; and it so happens that we find the same letter performing the very same office in the Latin *eram*, in the Greek $\eta\nu$ for $\epsilon\alpha\nu$ or rather $\epsilon\sigma\text{-}\alpha\text{-}\nu$, and $\epsilon\tau\theta\epsilon\text{-}\alpha$; as also in the S. *a-bhav-a-m* 'I was;' and *a-bhar-a-m* for *a-bhar-a-am* = *ferebam* (V. G. § 437, Annm.). I would not speak with any positiveness as to the origin of this suffix, but I think it may be one with the preposition \bar{a} , i.e. *ab*, which by its meaning 'away' may well signify the past or that which is gone. In $\epsilon\text{-}\tau\theta\epsilon\text{-}\alpha$ indeed we have yet another distinguishing letter in the initial ϵ , just as the past perfect in Greek $\epsilon\text{-}\tau\epsilon\tau\nu\phi\text{-}\epsilon\text{-}\alpha$ again places before us a final *a* and an initial ϵ . This initial ϵ then, or as it is called 'syllabic augment' (a nicely unmeaning name, by the way) I am somewhat disposed to hold in the same light, when I call to mind that in Sanskrit, as was just seen, it takes the very form *a*. Nor let it be objected to this view, that it assumes an idle repetition of the same symbol, for we have a parallel case in Spanish, where in place of *meum*, *tecum*, the language, not satisfied with *migo*, *tigo*, deems it preferable to say *con-migo*, *con-tigo*, i.e. to repeat the preposition. At any rate I hold the derivation of the S. augment *a* from a preposition like

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without any special suffix to denote futurity, the common part $\gamma\rho\alpha\psi$ having for both tenses a σ alone attached to the stem of the verb. Once more the Sanskritists, at any rate with consistency, claim this sibilant as the representative of the substantive verb. Thus Bopp (§ 527, p. 402) tells us distinctly that "Sanskrit and Greek in that tense of past time, which we call aorist, unites (what he calls) the other root of the subst. verb, viz. *as*, $\epsilon\varsigma$, with the attributive root." So too speaking of the future (§ 656) he says: "In the composition (of this tense) the Greek drops the vowel of the root of the 'Hülfsverbum,' hence $\delta\acute{o}\text{-}\sigma\omega \dots \delta\acute{\epsilon}\iota\kappa\text{-}\sigma\omega$." Prof. Max Müller again follows him (p. 234): "In the Greek futures in $\sigma\omega$ we have the old auxiliary verb *as* 'to be.' " But the same objections which I raised in reference to the two Latin tenses apply here; and accordingly I look elsewhere for a solution of the present problem.

In agreement with the principles I have from the outset maintained, I first ask what are the oldest forms of the Greek future, and as usual expect the later forms to be the most contracted. Μαχουμαι , fut. of μαχομαι , grew out of μαχεομαι , this again out of μαχεςομαι , itself a shortened form of μαχессομαι ; αροσω has what some call an epic form αροσσω . Δαμω is used as future by Homer; and the name of futures is given to δαμασω and δαμασσω . To ερνω are assigned as futures ερνω , ερνσω , ερνσσω ; to ανω ανσω and ανσσω . So again the aorists in their fullest forms appear as εμαχессαμην , εδαμασσα , ειρνσσα , εκομισσα from κομιζω , etc. Thus alike for futures and for aorists we are brought to forms $\text{ασσ εσσ ισσ οσσ υσσ}$, that is, to the suffixes which played for Greek verbs the very same part as *ab*, *eb*, etc. for Latin verbs. I conclude then that the so-called futures of the Greek language are really the presents of secondary verbs with the continuative sense, which at any rate better adapts them for use as futures than the simpler verbs of momentary power. The one awkward result is that the so-called first aorists ought to have been past imperfects; and I venture to affirm that such must have been the original power of this tense. That the several tenses of past time, whether called past imperfects, present perfects, or aorists, are not limited to their own special duty

seems well established. Thus Bopp (§ 513) says: "The Sanskrit has for the expression of past time forms which represent those of the Greek imperfect, aorist, and perfect; without however attaching to those several forms the gradations of meaning which belong to the Greek tenses. In Sanskrit they are all employed without distinction in the sense of the Greek aorist or imperfect. Most frequently however the reduplicated preterite, which in form corresponds to the Greek perfect, supplies the place of the aorist. A tense exclusively set apart to express the completion of an action is utterly wanting in the Sanskrit." Again in a note appended to § 588 he says: "In the Veda dialect the tense most commonly employed (*das vorherrschende Tempus*) in the expression of a complete act is the aorist." Unfortunately he does not define which of his so-called aorists (for his own book gives two), whether that represented by *a-dik-sh-a-m*, *a-dik-sh-aś*, *a-dik-sh-a-t*, which he himself with good reason treats as the equivalent of the Greek first aorist, $\epsilon\text{-}\delta\epsilon\iota\kappa\text{-}\sigma\text{-}\alpha$ $\epsilon\text{-}\delta\epsilon\iota\kappa\text{-}\sigma\text{-}\alpha\text{-}\varsigma$ $\epsilon\text{-}\delta\epsilon\iota\kappa\text{-}\sigma\text{-}\epsilon\nu$; or that other aorist of very different form, for which his examples are *abódisham* *abódhís* *abódhít* and *aváksham* *avákshís* *avákshít*, i.e. what on the evidence of their final syllables *am* *ís* *ít* I cannot but think represents a present-perfect tense. Thus I am disposed to think that the S. itself was not so much wanting in present-perfects as in aorists. Be this as it may, Bopp himself draws attention to the fact that "the German preterite, which in origin coincides with the Greek perfect and the reduplicated preterite of Sanskrit, has in like manner abandoned its proper perfect meaning; while in Gothic the same tense does duty for an imperfect and an aorist, and even a past perfect, but not to the exclusion of the perfect." It is thus that in our own language the forms 'he sang,' 'he laughed,' to include examples from strong and weak verbs, though alike present-perfects in origin, are in practice habitually used as past-imperfects and aorists. Nay even for Greek we have the authority of no less a scholar than Buttmann (*Larger Gr.* § 137, 6, *Obs.* 4) for the assertion that "in Homer the distinction between the (past) tenses is not yet so marked; and the *imperf.* in particular is still frequently confounded with the *aor.*, which was only, as it were,

at its birth;" and in a note he makes special reference to Il. i. 437-8, 465, and ii. 43-5. In Herod. too he goes on to say the *imperf.* is often used as an *aor.* Such remarks keep me in countenance, when I contend that the first aorist itself was at the outset a past imperfect. I add to all this, what was urged above (p. 142), that an aorist could not have been wanted for the earliest uses of language. I see then no difficulty in the assumption that *εγραψα* and such forms were originally put together to denote past-imperfects, although eventually they got into use as aorists. Of course in the whole of this discussion it has been implied that, reversing the usual line of thought, I regard such forms as *δαμ-ασσω*, *αρ-οσσω*, *ερ-νσσω*, etc., not as formed from *δαμω*, *αρω*, *ερνω*, and so on by the insertion of a new suffix; but as the truer forms, from which the latter proceeded by curtailment of the suffix, in other words by the gradual loss of the sibilants, *δαμ-*, *αρ-*, and *ερ-* being the simple stems; and occasionally we find good evidence of this, especially in second aorists, as *εδαμον* and *εδαμην*.

Perhaps this is the fitting place to take notice of such forms as the L. *fáxo*, *capso*, which Madvig (Opusc. alt. p. 60) regards as simple futures formed on the analogy of Greek futures like *τυψω*, *πραξω*; but that they are perfect futures seems to be the opinion of other scholars, and is placed I think beyond all doubt by two passages which Neue (Formenl. 2, 430) quotes: "aeque Bellona mī . . . créduat, Ni illum éxanimalem fáxo, si conuénero, Niue éxheredem févero uitáe suae," Pl. Bac. 4, 8, 6; and: "Peribo si non févero; si fáxo, uapulábo," Pl. ap. Gell. 3, 3, 8. Not less decisive is the passage in the 'Capteiuei' (3, 5, 37): "Pol si ístuc faxis, háu sine poena féveris," for as Madvig himself observes (Gr. § 340, obs. 2): "If the fut. exact. stands both in the leading and subordinate propositions, it is intended to indicate that the one action will be completed at the same time with the other: qui Antonium oppresserit, si bellum confecerit (Cic. Fam. 10, 19)." Contrast again "si ita faxitis, uestrae res meliores erunt" of Livy (23, 11, 2) with "sei (= sic) si fecerit, gaudebit semper" of the old inscription (CIL. 1, 1447). Forms like *amasso*, for *amaueso* = *amauero*, present no difficulty; nor *prohibesso* any

serious difficulty, as it merely implies that *habeo* had at one time a perfect *habui* by the side of *habui*. But Madvig also denies the very existence of *faxem*; and yet in the sentence: “*Sí quis hoc gnató tuo Tuos séruos faxet, quálem haberes grátiam,*” Pl. Capt. 3, 5, 54, Lindemann’s reading *faxit* Madvig would be the first to condemn, as a solecism. The sole objection to *faxet* must be the *a*, where an *e* was to have been expected; but this applies as much to *fazo* itself, as also to *adaxim* for *adegerim*, as to which Neue’s suggestion that “the presence of the *a* seems to be connected with the fact that according to Gellius (9, 6) the *a* was pronounced long in *actito* as in *actum* and *actus*,” is not to be accepted. Gellius probably meant only that the *c* in *actus*, etc. was silent, so that the Latin sound was what is still heard in the Italian *atto*, *fatto*, etc.

In the Romance languages the futures, as was long ago pointed out, are formed on a very simple principle, the attachment of the present of the verb ‘have’ to the infinitive of the verb in question. This tense runs in

Ital.	ho, hai, ha; abbiamo, avete, hanno;
Span.	he, has, ha; habémos or hémos, habéis, han;
Fr.	ai, as, a; avons, avez, ont;

while the futures of the several verbs *sentir* Ital. and Fr., *hablár* Span. are—

Ital.	sentir-o, -ai, -a; -emo, -ete, -anno;
Span.	hablar-é, -as, -á; -émos, -éis, an;
Fr.	sentir-ai, -as, -a; -ons, -ez, -ont.

Here the only marked change is in the first and second persons plural, where the syllable corresponding to the *ab* of *habeo* is suppressed; but this was already seen in the Sp. *hémos*, and to a great extent in the Fr. *ont* for *avent*.

The theory receives, what it little needs, confirmation from the Spanish, which has in the same sense, *ha hablár*, written as two words, and *hablar-á*. In our own language we may say ‘I have to write;’ and the Latin again has, what is a complete equivalent, *scribendum est mihi*.

The so-called conditional of the same languages exhibits a

similar combination, the French and Spanish employing the past-imperfect of the same verb, the representative of *habebam*, the Italian that of *habui*. Thus 'I had,' etc. is in

Ital.	ebbi, avesti, ebbe; avemmo, aveste, ebbero;
Span.	había, habías, había; habíamos, habíais, habían;
Fr.	avais, avais, avait; avions, aviez, avaient;

while the conditionals for the same verbs as before are:

Ital.	sentir-ei, -esti, -ebbe; -emmo, -este, -ebbero;
Span.	hablar-ía, -ías, -ía; -íamos, -íais, -ían;
Fr.	sentir-ais, -ais, -ait; -ions, -iez, -aient.

And here again it is the same syllable *hab* or *av* that disappears.

As regards meaning, a form 'I had to do' seems not out of place in a conditional tense which speaks of the past, and leaves one to infer that some obstacle occurred to prevent the purpose or duty from being carried into effect.

The antiquity of such formations is great, if we may rely on the tradition that *daras* as a future of *dare* came from the mouth of the Emperor ^{Theodosius} ~~Theodosius~~ in answer to a contumacious person: *Daras* 'thou shalt give it,' and so gave the name to the town which was the scene of the occurrence.

It can scarcely I think be an accidental coincidence that the Latin tense which in power corresponds to this so-called conditional, viz. *scriberem*, etc. also seems to exhibit an infinitive, and this in all the conjugations, including the most irregular verbs, as *essem* and *possem*, *vellem* and *mallem*. I find too that for years in the Greek Lecture-Room of University College the tenses miscalled optative, as *τιθεην*, *ισταην*, *διδουην*, have been treated as corresponding in respect of meaning to the Latin tenses in *erem* *arem*, etc., in the belief that the Greek words have lost a consonant between the stem and the suffix, and that consonant probably a *σ*, which, when thrown between vowels, is ever apt to vanish, while at the same time it corresponds to an *r* in Latin. Thus *γενες-* (n. *γενος*) has a gen. *γεν-εος* (for *γενεσ-ος*), by the side of the L. *generis* from *genus*. Moreover the infinitival suffix of Latin must have been at the outset *ēse* rather than *ēre*, as shown by the form *es-se* and the archaic *dasi* = *dari*. But to complete the

similarity we ought to have authority for a σ in Greek infinitives; and accordingly we find what is wanted in the Doric $\gamma\epsilon\lambda\alpha\iota\varsigma$ for $\gamma\epsilon\lambda\alpha\nu$ or $\gamma\epsilon\lambda\alpha\epsilon\iota\nu$, $\iota\psi\omicron\iota\varsigma$ for $\iota\psi\omicron\nu\nu$ (Buttmann, § 88, Anm. 12 and § 105, Anm. 21), corresponding to the Doric $\eta\mu\epsilon\varsigma$ for $\eta\mu\epsilon\nu$ and $\epsilon\iota\nu\alpha\iota$. Thus a theoretic optative $\sigma\tau\alpha\iota\sigma\text{-}\eta\nu$ would correspond with all accuracy to *sta(e)r-em* (*-ēs -et*). There remains however for consideration the suffix $\eta\nu$, *em*; and one would desire to find for the Latin some representative of the Latin *habebam* or *habui*, perhaps rather of the latter, when we think of the Italian *sentir-ebbe*; but as the first syllable of *habeo* was alike for the three Romance languages so far crushed as often to lose all trace of the *b*, it was only to be expected that the same would happen in the Latin, if the verb was used for such a secondary office. And this will be the more readily credited, if it be found that a *b* between vowels was apt to vanish in Latin, the evidence of which is past all doubt. We see such action in the datives both singular and plural of Latin substantives, as in *musa-e* or rather *musa-i*, compared with *ibi*, *sibi*, *alibi*, etc., in *musis* or rather *musa-is* for *musabus*, compared with *deabus*, in *quibus* with *quīs* by its side, and so on. The same is seen in *iussi* and *iussus* from *iubeo*, in *ama-re* by the side of *amab-ilis*. But I seem to find special evidence for *habeo* itself as contracted in comic metre, for example in Terence (Eun. 2, 2, 32): “Si pótis est, tanquam philosophorum habent disciplinae ex ípsis;” and probably: “Habent déspicatam” (2, 3, 93), where a sound *ha’nt* would fit the metre; and do not we ourselves treat the labial with the same contempt, when we say *has* for *haves*, *had* for *haved*? Again *ămentum* seems to have grown out of *habimentum*. Nor is this root unknown to the Greek, existing as it does virtually in the vb. $\acute{\alpha}\pi\tau\omega$ and its derivative $\acute{\alpha}\mu\text{-}\mu\alpha$, the analogue of the Latin noun just quoted. Compare too the L. *capio*, G. *heften* and *heft*, E. *haft*. On the other hand the L. *habeo*, as a static verb, was entitled to its *e*. But I find, or I think I find, the Lat. *habē-* in Greek itself deprived of its labial. To the L. *habena* corresponds in meaning the Greek $\eta\nu\iota\omicron\nu$ of which $\iota\omicron\nu$ is of course a dim. suffix, and as $\Gamma\lambda\upsilon\kappa\epsilon\rho\iota\omicron\nu$ (Glycerium) comes from $\gamma\lambda\upsilon\kappa\epsilon\rho\alpha$, so $\eta\nu\iota\omicron\nu$ might be a dim. from a lost $\eta\nu\alpha$. Thus I would account for the termination

of $\sigma\tau\alpha\iota\eta\nu$, precisely as for that of *star-em*. It may be thought perhaps that the Greek termination $\eta\nu$ is by form better fitted to signify 'I was;' and that we should so arrive at a reasonable result 'I was to do so and so,' and should have done but for —, an expression which would accurately correspond to our use of 'I am to do' for a future; and the Slavie has a similar use in the old Russian *budu dyelati* 'operabor,' more literally 'I am to work.' My own inclination is to give a preference to the preceding explanation, as more in accordance with the formation of the Italian conditional.*

The next question is the origin of the so-called present subjunctive *scribam*, *teneam*, *audiam*, and *amem*, in which however the substitution of \bar{e} for *aa* corresponds to what is seen in $\bar{e}gi$ formed by reduplication from *ag-o*, and so standing for *a-agi*. Here as usual I ask myself what is the form in the oldest verbs, and I at once give a preference to those in *im*, etc., of which Neue (Formenl. 2, 338) supplies me with *sim*, *uelim*, *nolim*, *malim*; *edim*, *comedim*, *exedim*; *duim*, *adduim*, *interduim*, *perduim*, *creduim*. So too for the Umbrian A.K. say that "der Character des Konjunctiv ist *i*," but with the important addition: "an welchen die Personenendungen mittelst eines *a* antreten" (Sprachd. p. 140). Mommsen again seems to look upon a simple *i* as the characteristic of the same tense in Oscan (O. Studien, p. 63), quoting the examples *fu-id* = *fuat*, *ang-it* = *agat*, *hip-id* = *habeat*, *pruhip-id* = *prohibeat*, together with the plural *patens-ins* = *pandant*; but he also supplies an example, which may carry us a step further, viz. *sta-iet*, which closes the inscription called 'Cippus Abellanus' (ib. p. 84), and is by himself made one with the L. *stet*. But the fuller forms, *ia* of Umbrian and *ie* of Oscan, agree thoroughly with what is seen in the L. *siem* *sies*, etc., and in the S. *syam* of like meaning; also in S. *vid-yá-m* 'sciam,' *bib'r-yá-m* 'feram,' *ad-yá-m* 'edim.' Lastly, the subj. pres. of the verb 'to be' in Gothic runs: *sijáu sijáis sijái*; pl. *sijáima sijáiþ sijáina*. We may safely then assume *iā* or *iē* as the suffix of the tense in question, and the length of the

* Is it a mere accident that the conditional in Breton has a similar form *biz-enn*? (Legonidec's Gr., p. 82.)

vowel seems to point to the loss of some consonant, probably a nasal. But the Greek language has a special mode of expressing a potential or conditional tense, by the addition of the particle *av* to a verb; and again this particle in the older language takes other forms, as *κεν*, *κε* (but only as an enclitic) and in Doric *kā*. Hence *καν* or *κεν* may be taken as the earliest form; and I throw out two faint conjectures, first, that this word is one with our own *can*, a root already known to the Romans in the corrupted form *que-o*, which moreover once ended in a nasal, as there existed an archaic *ne-quin-ont*; secondly, that a word like *καν* or *κεν* might well take a form *yan* in its passage to the truncated *av*, just as *κεινος* corresponds to the G. *jēn-er*, E. *yon* on the one hand and to the Lith. *anā-s* or *an-s* on the other. If this explanation hold for the Latin present potential, it will no less serve for the Greek tense *τυπτω -ης -η*, etc. where the different vowel of the first person sing. and pl. would be due to the pronominal suffix, as in the fut. of the indicative *regam* as opposed to *reges*, etc.

In the so-called present imperative *scribe* and *scribite* we have beyond doubt corrupted forms of the present indicative, *scribis* and *scribitis*, used however as immediate futures. The loss of the final *s* is what is seen in *magis mage*, *uidebaris uidebare*, and *scribitis* compared with *γραφετε*. But in the other tense, which the old grammarians with good reason called a future, we find a suffix *-to*, *scribito*, *scribitote*, *scribunto*, *τυπτετω*, *τυπτετωσαν*, and *τυπτοντων*; and the question arises, Whence this *-to*? An answer to this I am not prepared to give; but it may be observed that the participles in *turo-* contain something similar in form; and this Sanskritists would derive from the agent-nouns, such as *scriptor*, on the evidence of the Sanskrit, which employs such nouns in the formation of an indicative future. For example the S. noun *dātri* or *dātar* corresponds to the L. *dator*, and from this is deduced a tense: S. *dātāsmi*, *dātāsi*, *dātā*; D. *dātāsvas*, *dātāsthas*, *dātārau*; Pl. *dātāsmas*, *dātāstha*, *dātāras*. Here the first and second persons attach to the noun the verb 'to be,' *asmi*, etc.; while in the third person we have simply the nom. of the noun *dātā*, *dātārau*, *dātāras*. Bopp indeed

calls the noun so used a participle, observing that in this construction it admits no change for gender, signifying indifferently 'he, she, or it will give;' and also comparing the absence of the verb in the third person to the Latin use of *amamini* for *amamini estis*. Can it be that *scriptor* is made up of the three elements *scrib* + *to* + *or* 'the man to give,' a division which is consistent with the doctrine that *or* corresponds to *wr* in the names of Welsh agents, as *bad-wr* 'boatman,' *mor-wr* 'seaman;' and this suffix *wr* is with reason regarded as one with the W. *gwr* = L. *uir*. All this agrees with our own suffixes in *sailor*, the Fr. *tailleur* 'tailor,' and indeed substantially with our more common suffix *er* in *writer*. The Greek terms for agents, as *οικητηρ*, *οικητωρ*, etc., seem to oppose the theory; but here also the *τ* may belong to what precedes. As *uer-e* of *uereor* seems to have grown out of an older *uerec-*, witness *uerec-undus*, so *οικε-ω* points to a fuller *οικε-εκ*; and then the final *e* is likely to have thrown out an excrescent *t*, making a theoretic *οικεκτ-ηρ* or *οικεκτ-ωρ*, from which the *κ* would be sure to vanish, leaving at the same time a long vowel (see Essays, pp. 237-8). The theory that *scriptor* meant in strictness 'the man to write' would thoroughly account then for the employment of such nouns in the formation of a S. future and a L. future participle; but the theory would be more satisfactory if we could give independent reasons for believing that a preposition *to* once belonged to the Latin vocabulary. In my Essays, (p. 57) I have referred to a suggestion, which Grimm (vol. iii. p. 254) throws out very doubtingly, that the Goth. *du*, G. *zu*, E. *to* may be one in origin with the Goth. *at*, old G. *az*, E. *at*, and so of course with the L. *ad*, on the assumption that there once existed a fuller preposition *adu*. In confirmation of Grimm's view I there show that the Gaelic actually possessed a prep. *ado* with the very meaning in question; and here I find a general support in the fact, that prepositions are apt to take three several forms in this way, as *εν ενι* and S. *ni* of the same power, *av ava* and Russ. *na*, which with all accuracy correspond to *ad*, Gael. *adu*, and Gael. *do*. It may be objected perhaps that under Rask's law an Eng. *to* ought to have for its L. analogue a form *do* rather than *to*. But even this law has its exceptions.

Indeed a L. final thick mute seems to have been pronounced as a thin mute. Thus *sub* corresponds to ὑπο, *sup* of *super*, *superi*, and our own *up*; *ob* to ἐπι, *ab* to απο and αψ; and so *ad* itself was probably pronounced as *at*, and indeed is often so written. Thus if Grimm's suggestion be valid, we might expect the L. trio to be *at*, *ato*, *to*. I give this theory for what it is worth, feeling that it involves too many doubtful points to be at once accepted by myself, let alone others.

The infinitive is of course a noun, though it differs from other nouns in not availing itself of the process called declension. The Doric infinitives in εν, as αγεν λαμβανεν (Buttmann, § 88, Anm. 10) have the suffix in a form well known to L. neuters, as *ungu-en*, and the archaic τυπτ-εμ-εν has a double suffix of diminution, like *teg-um-en*, while the Greek ον-ομ-α has substantially the same double suffix, for modern Greek adds a final nasal, which reappears in the verb ονομαίνω. Again such a form as τυπτεμεν, we are told, led, by dropping of the μ, first to τυπτεεν, and then to τυπτειν. The Aeolic χαιρην, ἐρπην, are probably, as Buttmann says, varieties of χαιρειν, ἐρπειν. In ιεν-αι τιθεν-αι τετυ^ϕφεν-αι we have yet an additional suffix, whose origin however I leave others to deal with. Then in Latin we find the ordinary suffix, *ere*, where, as I just said, the *r* is proved to have grown out of an *s* by the forms *es-se* and *dasi*, but this *er-e*, like *εν-αι*, was formed by the addition of a second suffix to an earlier *er* or *es*. Thus *biber* was a form known to Cato, says Charisius (p. 124 K.), who also quotes "inbebat biber dari" and "date illi biber" from old authors, where *biber* is at once a noun and an infinitive, in the latter case corresponding to Vergil's "dat habere nepoti." The abstract and diminutive nouns *genus*, *scelus*, *uber*, *tuber*, may also be compared with *biber*, etc. I venture now to assert again, what I asserted long ago, that the L. *er-e* as a double suffix corresponds in form to the Gr. *εν-αι*. But this theory has met with an opponent in the 'Academy' (No. 2, p. 56) on the ground that "the Greek ν, though it may represent a L. *s* at the end of a word (-μεν = -mus), never does so in the middle of one." To this argument I oppose first the fact that in the Doric infinitive γελα-ις the σ occupies the very position as a

final for which he admits an exception, while *r* is a final in *biber*. But the writer's limitation to finals seems in itself altogether arbitrary, and certainly will not hold for *μειζων μειζονος*, which has for its L. analogue *maior* (*maior*) and *maioris*. And this was to be expected; for as in Greek *ν* and *σ* are constantly interchanging, as in *τυπτομεν* = *τυπτομεν*, and from *σωφρων* we have a derivative *σωφροσυνη*, from *κρεμαννυμι* an adj. *κρεμαστος*, so in Latin *s* and *r* are so notoriously interconvertible that it would be simply idle to quote instances. Again that a L. *r* often corresponds to a Gr. *ν* is placed beyond doubt by *merus* = *μυρος*, *dirus* = *δειρος*, *uires* = *φύες*, *mora* = *μωρη*; while within the limits of Latin we find *femur* often forming its oblique cases as if from *femen*. It may be thought however that the difference of quantity in the finals of *ere* and *εναί* is fatal to the theory of their identity. Here however I claim rather a proof of the truth of my assumption; for as in Greek the *αι* of *εναί*, originally long, became short, so the quantity of the final *e* in Latin was for the old language long. First as regards the Greek form. Buttmann, the warm advocate of the prevalent accentual theory, lays it down that "a final *αι* or *οι*, though long for metrical purposes, must for the most part be considered as short in the rules of accentuation" (§ 11, 7). Thus, says he, "the pl. nom. *τρίαιναί*, the passives in *αι* as *τύπτομαι*, the inf. *ποιῆσαι*, are accented in a manner that is inconsistent with the long final. . . . It is clear therefore that in these very common suffixes the diphthongs had been so far worn away that in the ordinary language they sounded to the ear as short." Then for the Latin infinitive I quote from Plautus, Terence, etc. :—

Glor. 1, 1, 27. Quid? bráccium? Illud dícerē uolúí, fēmur.

— 3, 2, 34. Numquam édepol uídí prómerē. Verum hóc erat.

— 4, 4, 21. Óppidum quoduís uidetur pósse expugnará dolis.

Trin. 2, 4, 183. Nam cértumst sine dote háut darē. Quin tu í modo.

Asin. 2, 1, 2. 'Atque argento cómparando fíngerē falláciam.

Pers. 2, 3, 6. Eám forē mihí occásionem, ea núnc quasi decidít de caelo.

Truc. 2, 4, 71. Non áudes aliquod míhi darē munúsculum?

Pseud. 2, 3, 121. 'Ego scelestus nunc argentum prouiderē possūm domo.

— 4, 2, 46. Nullam salutem mitterē scriptam solet.

Poen. 3, 3, 15. Eum oportet amicum quaerere comitem sibi.

Andr. pr. 23. Male dicerē, malefacta ne noscant sua.

— 2, 6, 6. Potin es mihi uerum dicerē? Nihil facilius.

Eun. 3, 2, 38. Et flamma te peterē cibum posse arbitror. (So Bemb.)

Ph. 5, 9, 7. Ansculta. Pergin credere? Quid ego obsecro . . . ?

Titin. ap. Non. 144, 6. Ipsū quidem hercle ducere sanē nouit.

The following I set apart, because alike in the comic septenarius and in the full iambic tetrameter there is a marked pause at the close of the second dipodia. Yet even to these I attach a value, after the principle has been established as above. I give first those which belong to the former metre :

As. 2, 4, 14. Apocede ac sine me hunc perderē, qui semper me ira incendit.

— 32. Nunc uidi huc ipsum adducere tarpessitam Exacrambum.

— 36. Quid reliquom? Aibat reddere, quum extemplo redditum esset.

— 57. Saluom hercle erit. Credam fore, dum quidem in manu ipse habebo.

Glor. 4, 6, 24. Si pol me nolet ducere uxorem, genua amplector.

— 26. Consciscam letum: uiuerē sine illō scio me non posse.

Poen. 4, 1, 5. At ecce me fano recipere uideo se Synerastum.

— 5, 4, 94. Vix hoc uidemur credere. Magis qui credatis dicam.

Merc. 3, 1, 11. Nec pecua ruri pascere nec pueros nutrire.

Cure. 4, 2, 18. Eum rem fidemque perderē, tametsi nil fecit aiunt.

Rud. 2, 3, 59. Qui suos parentis noscere potisset: eam ueretur.

Haut. 4, 4, 2. Decem minas quas mihi dare pollicitust. Quod si is nunc me.

Hee. 5, 2, 22. Eo, etsi scio pol es fore meum conspectum inuisum hodie.

And then from complete octonarii :

Amph. 1, 1, 52. Si quae ásportassint rédderē : se exércitum ex-templó donum.

Poen. 4, 1, 2. Studeo húnē lenonem pérderē, qui meúm crum misere mácerat.

Merc. 1, 2, 15. Perii, ánimam nequeo uórterē : nimis níhili tibi-cén siem.

Andr. 3, 5, 7. Qui súm pollicitus dúcerē? *qua frónte** facere id áudeam?

Add to these from an anonymous satirist (Camb. Journ. of Phil. 1, p. 67):—

Cymbala quem imbuerat quaterē Berecynthia mater.

A large part of these examples were already given in my 'Essays'; but finding that Ritschl in the Rh. Mus. still rejects the doctrine, I have thought it best to give the evidence in fuller detail. The first example he would correct by transposition and the creation of a new Latin word: "Illut féminur uolui dícere."

It may be worth while to add that a suffix *en*,† as in the Doric inf. *αεν*, appears with little or no alteration in many of the existing languages of Europe, as Breton *béz-a*, but in the dialect of Tréguier *bé-añ*. In the Teutonic family the inf. for Gothic, O. G., O. Sax., A.-Sax., ends in *an*, while in O. Norse, dropping the nasal, as in Breton, it is cut down to *a*. In old English the *e* final of the inf. still constituted a syllable; and even at the present day the provinces in some quarters preserve the suffix. Thus a friend some years back heard a clerk in a Somersetshire church announce: "This is to give notice that after Sunday next I (A. B.) shall cease to elerky."

Lastly, in the Latin gerund *scrib-end-um* we have two, and indeed the very same suffixes, which were seen in *teg-um-en*, only

* *Qua fronte*, my conjecture for *qua fiducia* of MSS.; *fiduciâ*, which editors find inconsistent with the metre, being probably a gloss.

† Probably *en* was once the final both of the Gr. and L. infinitive; which would account for the *ai* of *αεν-αι*, and the long *e* of *dicere*.

in inverted order, for the *d* is only exerescent. Of course the gerund is older than the gerundive, for it is in the older writers, such as Plautus, or in the poets who affected an old style, as Lucretius, that we find such phrases as “Mihi hac noctu agitantumst uigilias” (Trin. 4, 2, 27), and “Poenas in morte timendumst.” Such a construction is not to be found in Cicero, unless we include the passage “uiam quam nobis quoque ingrediundumst” (De Sen. 2, 6). On the other hand there seems reason for suspecting that the text of Terence has been tampered with in the Phormio (4, 4, 20): “Spatium quidem tandem adparandis nuptiis Vocandi sacrificandi dabitur paululum,” for the substitution of the gerund *apparandi nuptias** would bring about an agreement with the gerunds that follow. Similarly (in 2, 1, 18), by the slight change of *habendae compedes* into *habendum compedes*, we should remove the solecism in these words, as compared with *molendum esse* of the Bembine in the simplest manner. Of course in the Heeyra (3, 3, 12) we have a gerund, not a gerundive, in “Eius uidendi cupidus,” where *eius* refers to *Philumena*. Indeed with a genitive the gerund, rather than the gerundive, was long retained. See not only Ter. Haut. prol. 29, but even Cic. Verr. 2, 2, 77.

* So Umpfenbach now gives the passage, traces of this reading having been found in the Bembine and MS. C.

CHAPTER XVI.

PASSIVE AND REFLECTIVE VERBS.

IN dealing with the passive and so-called middle verbs the first question which presents itself is, Which of the two possesses the better title? for in the Greek language the two voices, to use the ordinary term, have so much in common as to form, that they in all probability had a common origin. This identity of form is more particularly visible in the two imperfect tenses of the present and past, as also in the perfect tenses of the same; but even the aorist tenses in $\theta\eta\nu$ and $\eta\nu$, commonly limited to use as passives, in many verbs take upon them the signification of the middle voice. In the Latin language a middle or reflective verb is commonly ignored; but this utterly without reason, for all the Latin writers abound with examples, as *accingi* 'to gird oneself,' *procului ad pedes* 'to throw oneself at (a person's) feet,' *lauari* 'to bathe,' *mutari* 'to change,' *ueri* 'to turn,' *reueri* 'to return,' *armari* 'to arm oneself.' When Philoctetes, to quote from Ovid (*Met.* 13, 53), "*Velaturque aliturque auibus*," we are scarcely to conclude that he had a nurse to dress and feed him. In the passage, "*rerum tamen ordine ducar*" (*ib.* 161), I for one prefer the translation, "I will guide myself"; and I would deal in the same way with "*mecum confertur Ulixes*" (v. 6); "*non tu tantum terreris Ulixes, sed fortes etiam*" (v. 83); "*quanto cogor meminisse dolore*" . . . (v. 280); "*iam tum exercebar in illis*" (v. 921): all, be it observed, from a single book of the 'Metamorphoses.' Nay, I venture to affirm that we shall generally find on a close examination that the so-called deponent verbs have not received their full explanation, until the notion of a reflective pronoun

presents itself. Thus the verb *queri* 'to complain,' I hold to be of the same stock, both with *quater* and with *ferire*.* A Roman habitually preferred an *ĕ* before *r* to other short vowels; and the free interchange of *r* with *t* is well seen in Greek neuters, such as ἥπαρ, ἥπατος. In the perfect participles *quas-sus* and *ques-tus* the root syllables come nearly to identity. Then as regards the *f* of *ferio*, one would hesitate to admit the connection, until it is found that the root πετ of πιπτω appears with a guttural in *cădo*, and with an *f*, not merely in E. *fall*, *fell*, but also in L. *fall-o* 'trip up' and σφαλλω. Similarly the Aeolic πιτροπες exhibits a *q* in *quatuor*, an *f* in our *four*; and again we have πεμπε, *quinque*, *jive* (G. *fünf*). I venture then to connect παλ of παλλ-ω, *quat* of *quatio*, *quer* of *queror*, as well as *fer* of *ferio*; especially when I take into view *querquera febris* 'ague,' καρκαρ of καρκαίρω, and *cor* of *coruscus*. So much for form. The translation of *queror* as, 1, 'I beat myself,' and, 2, 'complain,' has its precise parallel in κοπτομαι 'I cut or beat myself' (through grief), and so 'bewail,' and *plangor* of like power, whence comes our very verb *complain*. The interchange of *r s* and *t* is clearly seen in the G. *was*, E. *what*, and in the compound forms, G. *war-ein*, E. *where-in*.

In the deponent verbs *blandior*, *largior*, I make myself or act 'the blandus homo,' or 'the largus homo,' as also in *græcor*, *bacchor*, *ancillor*, *aemulor*, *medicor*, *gratificor*, etc., the notion of a reflective is felt as soon as the question is asked; and *uereor* has its most precise translation in the old phrase 'I fear me.'

We shall presently see that other characters which are claimed as specially belonging to the middle voice of the Greek language are in fact shared by the Latin. But for the present I recur to the question, which of the two forms, passive or middle, has the better claim in respect of antiquity? Buttmann seems to give an undoubting verdict in favour of the passive. Thus he begins his 89th section with the words: "The notion of passive includes also the case when the treatment which I suffer proceeds from myself." And in § 113, No. 6, he says: "Those tenses which regularly belong to the middle, the aorist and future of the

* Hence the intimate connection between *ferio* and *percussio*.

middle, still in form belong to the passive, and originally no doubt were actually passive, as much as the present itself; and hence something of this passive power remained in their use. This however applies almost solely to the future of the middle voice."

I cannot help thinking that this preference is grounded chiefly on the fact that for the classical languages the sense of a passive is of more frequent occurrence, an argument to which I attach but little value, when opposed to the indications which the anatomy of the form will be found to supply; and this I proceed to examine. The six forms of the present of the passive, viz., *uertor*, *uertēris*, *uertitur*, *uertimur*, *uertimini*, *uertuntur*, exhibit with one exception a final *r* or *s*; and as we are familiar with the Latin habit of changing an *s* into *r*, we are naturally disposed to regard *s* as the original letter. In *uertor* the distinguishing letter is simply an *r*; and so also in *uertitur* and *uertuntur*, seeing that the forms of the active *uertit* and *uertunt* must once have been written as trisyllabic words, *uertiti*, *uertunti*, as shown both by the εὔρι, εὔρι (Dor. εὔρι) of the Greek substantive verb, by the Sanskrit forms, and even on Italian ground by the Sard variety *sunti* (see below). *Vertisi* in like manner must have been the old 2nd person; and the passage from *uertisi-s* to *uerteri-s* is explained by the same habit of changing *s* to *r*, and at the same time giving a preference to a short *e* before *r*. This latter law is well seen in *paluis cucumis cinis*, gen. *pulueris cucumeris cineris*; in sing. g. *nucis*, with an archaic plural *nucer-um*, as Charisius (col. 40 P. p. 54, l. 25 K.) observes, "*Nucerum Caelius dixit, Gellius uero regerum et lapiderum.*" *Vertimus* with the suffix added might have given us *uertimur-ur* or *uertimurr*; but in either case this would have passed into *uertimur* (see above, § 137). *Vertimini* stands by itself; but this is generally held, and I think with reason, to be a mere participle in the nom. pl. The Greeks in like manner preferred τετυμμενοι εἰσι to an unpronounceable τετυπνται; and the non-appearance of *estis*, which should have accompanied the assumed participle *uertimini*, was an act of no great violence, seeing that the use of the participle was always limited to the second person. A German too is much in the habit of omitting

the substantive verb in accessory sentences, as "Gustav der in der Schlacht gestorben" for "gestorben ist." This form *uertimini* is of course in suffix one with the Greek participles as *τυπτομενοι*; but we must not on that account infer that it is a loan from the Greek language; for it is one which was already familiar to the Roman ear in the name of the god *Vertumnus*, in *alumnus* from *alo*; and the noun *calumnia* gives us good ground for the assumption that *calumnus*, 'one who accuses,' must once have existed.

Similar results would have followed from a comparison of the other tenses of the imperfect verb in the two voices for all the moods. In the imperative mood *uerte* and *uertere* there is a slight difficulty, which vanishes when we call to mind that these are both of them virtually identical with the corresponding forms of the present *uertis* and *uerteris*, precisely as the plural *uertite* is a corruption of *uertitis*. The appearance of *agier* in place of a theoretic *agerier* is but an example of the principle already stated (p. 137), that when two consecutive syllables exhibit a similarity of form, the omission of one is the ordinary result; and secondly, the passage of *mirarier agier* through some such form as *mirarie agie* into *mirari agi*, so far as the contraction of the vowels is concerned, corresponds with the change of the voc. *filie* into *fili*, of the abl. *auie* into *auī*, of the imper. *audie* into *audi*.

Of course the final *s*, which thus attaches itself to the active verb in order to constitute a passive, must once have had a vowel of its own; and one cannot but think of the little pronoun *se*, which is pretty well all one could wish on the theory that the reflective use was that which first belongs to this formation; that is, if we limit our view to the third person sing. or plural, for *uertitur*, *uertuntur*, as reflectives are equivalents of *uertit se*, *uertunt se*. But scarcely so for the first and second persons. Yet as *se* has already the peculiarity of being applicable to words of either number and of every gender, it seems to be no violent assumption that in origin it may have been used of any person. Still, if the assumption be a valid one, we may expect to find confirmation of it in some of the kindred languages; and we do so, in more than one quarter.

First it is seen in the Sanskrit use of the possessive pronoun *sya* (pron. *swa*), corresponding to the Latin *suus*, but carrying with it the meanings also of *meus*, *tuus*, *noster*, *vester* (Bopp, § 341); and the same language has an indeclinable *svayam*, which also is used of all numbers and genders; and appears likewise as the first member of compounds as *svayam-bhū* 'existing by itself', *svayam-vara* 'Selbst-wahl', just as the simple *sya* appears in *sya-bhū* and *sya-stha* 'independent.'

So again the Gothic *si-lba*, G. *se-lber*, and our own *se-lf*, have for the first element the reflexive pronoun (V. G. § 308, vol. ii. 61); and yet the word is available also for the first and second persons, as 'myself, thyself,' etc.

But the most distinct and conclusive evidence is found in the Slavic languages. Thus speaking of the oldest monument of this class, as preserved in the books of the Russian Church, Dobrowsky (Instit. Ling. Slav. part iij. § 19, p. 602) says: "Reciprocum **СЕБЕ, СЯ** non solum ad tertiam personam, sed etiam ad subjectum seu nominativum primae et secundae personae referunt Slavi." So again Hamonière, in his Grammar of Modern Russian (p. 116), has: "Le pronom réfléchi est de toutes les personnes, de tous les genres et de tous les nombres." Indeed his declension of this pronoun runs thus:

Gen. Себя, de moi, de toi, de soi, etc.

Dat. Себѣ, à moi, à toi, à soi, etc. }

Acc. Себя, moi, toi, soi, etc. } *se.*

Inst. Себою, avec moi, avec toi, avec soi, etc.

Prép. О себѣ, de moi, de toi, de soi, etc.

The same writer, in speaking of the reflexive verb (p. 126), says: "Le verbe réfléchi n'est autre chose que le verbe actif, auquel on ajoute la terminaison **ся**, qui est l'abréviation du pronom personnel réfléchi **себя**, *se*, *soi*."

The other members of the Slavic family share the principle with the Russian; and some, as the Serbian, have the affix in the very form which exists in the Latin accusative, viz. *se*. Thus Stephanowitsch, in his small Grammar translated by Grimm, has (p. 64) this paragraph: "Reciproca.* Sie entspringen im

* *i. e.* reflexives.

Serbischen durch den Anhang des Pronomens *se* für alle drei Personen, . z. B. *pijeme* (ich rasire mich); *kajeme* du bereuest; *nađamise*, hoffen; *nađajivšise*, sich anschicken, und unzählige andere, deren Formen nicht als eine besondere Flexionsart betrachtet werden dürfen."

So also in Bohemian, Dobrowsky (Lehrgebäude, p. 232) divides his passive voice under two heads, the first being a conjugation with *se* :

Sing. 1	<i>gmenugi se</i>	2	<i>gmenugeš se</i>	3	<i>gmenuge se</i>
Plur. 1	<i>gmenugem se</i>	2	<i>gmenugete se</i>	3	<i>gmenugj se</i>
Ich werde genannt, u. s. w.					

That this is really a middle voice is in a manner admitted in the next paragraph of his Grammar, where he says that in many such verbs an ambiguity arises from their being used as reciprocals (*i.e.* reflectives). Thus 'myge se' rather signifies 'I wash myself.'

Again Kopitar, 'Grammatik der Slavischen Sprache in Krain, Kärnten und Steyermark' (p. 282) has :

"Reciprocum für alle drey Personen :

"Sing. N. mangelt.

G. *sèbe*, *se* ; meiner, deiner, seiner, unser, euer, ihrer.

D. *sèbi*, *si* ; mir, dir, sich, uns, euch, sich.

A. *sèbe* (*sé*), *se* ; mich, dich, sich, uns, euch, sich.

L. *sèbi* ; mir, dir, sich, uns, euch, sich.

I. *sebó* (*seboj*, *sábo*), mir, dir, sich, uns, euch, sich."

And he adds in a note that 'svoj,' the reciprocal possessive, is also used for all three persons.

From Babukić's 'Ilirische Grammatik' (pp. 51, 75, and 69) I quote the following : "G. *sebe* (*se*), D. *sebi* (*si*), A. *sebe* (*se*), Loc. *sebi* ; Instr. *sebo* (*sobom*).—Das zurückkehrende Fürwort *sebe* wird nicht allein für die 3., sondern für alle Personen einfacher und vielfacher Zahl gebraucht. Es heisst daher nicht *ja mene preporučam*, ich empfehle mich, sondern *ja se preporučam*.—Die zurückkehrenden Zeitwörter werden wie die andern abgewandelt, nur dass sie den Zusatz *se* (sich) bekommen, als : *šetati se*, sich ergöhen, spazieren."

Let me add that generally in the Slavic languages this accusative *se*, by the addition of which a simple verb becomes a reflexive, is further cut down to a mere *s* if a vowel precede, nay, is even written then habitually as an enclitic; and thus we are brought to the very form which constitutes the reflexive in *verteri-s*.

No language is more instructive here than the Lithuanian, where the formation with an added *s* shows itself not merely in the imperfect tenses of the several moods, but also in the perfect tenses, and even in the so-called supine. For comparison, then, I quote from Schleicher's Grammar part of the conjugation of the simple verb *sùk-ti* 'to turn,' and of *linksmin-ti-s* 'to console':

Pres. *suk-ù suk-i sùk-a*; *sùk-ava sùk-ata sùk-a*; *sùk-ame sùk-ate sùk-a*.

linksmin-us -ës -äs; *-avos -atos -äs*; *-ames -ates -äs*.

Pret. *suk-aú suk-aí sùk-o*; *sùk-ova sùk-ota suk-o*; *sùk-ome sùk-ote sùk-o*.

linksmin-aus -ais -os; *-ovos -otos -os*; *-omes -otes -os*.

So the two present part. nom. are *suk-as* (for *suk-ants*) and *linksminas-is*; the gerund undecl. *suk-ant* and *linksminant-is*; supines, *suk-tu* and *linksmin-tu-s*. Nay, in compound verbs a second *si* is interposed between the preposition and the verb, as *pa-si-linksmin-äs*, where *pa* has the power of our own prefix 'be.'

Akin to the Lithuanian is the language of Old Prussia, for which I must refer to the work of Nesselmann. Of this language but few remains exist. In page 75 of his work Nesselmann draws attention to the use of *sin* or *si*, abbreviated from the acc. *sien*, as an enclitic affix to reflexive verbs in the third person; and in the following page he quotes an instance of its being attached to a reflexive verb in the first person plural: *Mes mans enimmimai-sin* 'wir nehmen uns an.' Here, although *mans* 'us' had preceded, there was no solecism felt in the addition of the reflexive suffix *sin*.

The Scandinavian family also support the view for which I am contending; but here again the grammarians give an undue preponderance to the passive over the reflexive voice. Thus Rask,

in his accidence of Old Norse (§ 239) speaks only of the active and passive voices; but in his syntax the truth oozes out. In § 455 he for the first time informs his reader that the passive is used also for a reciprocal, meaning a reflective, as, *Ingi frelsaðist*, 'Ingi saved himself.' The mode of forming the so-called passive may be seen in the addition of a suffix to the simple verb, taking *kalla* 'to call' as the example:

S. 1 *kalla*, 2 *kallar*, 3 *kallar*; pl. 1 *köllum*, 2 *kallið*, 3 *kalla*.

S. 1 *kallast*, 2 *kallast*, 3 *kallast*; pl. 1 *köllumst*, 2 *kallizt*, 3 *kallast*.

Here the suffix is evidently *st*, of which the *t* may safely be regarded as an outgrowth from the sibilant. There are two slight irregularities. In the 2nd and 3rd persons of the singular the *r* of the active voice disappears in the reflective forms, simply because this *r* is itself a substitute for an older *s*. In the 2nd p. pl. the replacement of *ðst* by *zt* scarcely deserves notice.

The Swedish grammarians naturally follow the system which prevails in the arrangement of verbs in the old Norse, as the parent language. Thus Dieterich divides his verbs into 1 active, 2 passive, 3 deponent. Under the last head fall *att trivas* 'to thrive,' *att hoppas* 'to hope,' *att blygas* 'to blush;' in all of which the reflective power is unmistakable. For comparison of forms I quote the two present tenses as before:

S. 1, 2, 3 *kallar*; pl. 1 *kalla*, 2 *kallen*, 3 *kalla*.

S. 1, 2, 3 *kallas*; pl. 1 *kallas*, 2 *kallens*, 3 *kallas*.

Again the Danish (Rask's Gr. p. 40) has for the simple verb *kalder* throughout the sing., *kalde* throughout the plural, which for the so-called passive both give place to *kaldes*. So too the preterite, imperative and infinitive of the simple verb, viz. *kaldede*, *kald*, and *at kalde*, become respectively *kaldedes*, *kaldes*, *at kaldes*.

I next turn to the Lapp, holding with a firm confidence, that it has a strong affinity with the Indo-European family. Authorities differ somewhat widely in their account of this language. We find in Fiellström, a writer whose statements deserve the higher value because he repeats what he himself heard (Gramm. Lap. p. 63), that in the passive verb the disyllabic form *tofwa* is inserted for all persons and both numbers between the base of the

verb and the personal suffixes. Thus I take from pp. 58 and 63 the following :

ACTIVE.

S. mon jackab.	Pl. mije jackebe.
todn jacka.	tije jackebet.
sodn jacka.	sije jackeh.

PASSIVE.

S. mon jacketofwab.	Pl. mije jacketofwebe.
todn jacketofwa.	tije jacketofwebet.
sodn jacketofwa.	sije jacketofwe.

He further tells us that this form *tofwa* at times changes its *t* into an *s* in the passive infinitive. Thus the inf. act. being *jacket*, the inf. pass. is *jactolofwet* (probably a misprint for *jacketofwet*) or *jakesofwet*; and lastly he says that in the pres. ind., and still more in the perfect, the same element is often contracted into *tu* or *tu*. As in Old Russian the reflexive pronoun has for its base (see above) a syllable *seb* or *sob*, we may also assume that *σφε*, etc., of the Greek pronoun must have had in an earlier shape of the language a base *σεφ* or *σοφ*; that is, what is identical with the commencing portion of the Lapp *sofwa*.

On the other hand, in Rask's 'Lappisk Sproglære,' I find the inserted element divested of any initial consonant, and assuming the several forms *juva* or *juv*, *uva* or *uv*. (See §§ 188, 189, 194, 198, 207.) I accept these statements, not as superseding what Fiellström tells us, but as giving another dialectic variety. That a suffix *toufwa* or *soufwa* should lose its initial consonant is much the same as what we see in the article *ὁ, ἡ, το*, and in the reflexive pronoun *ἐ, αὐ*.

I have passed over the Greek language, because it furnishes no distinct evidence of a suffix like *se*; but this is scarcely matter for surprise, seeing that this language so frequently discards the sibilant. It seems not unlikely therefore, that such a consonant lies buried so to say in the *αι* of *τυπτομαι, τυπτονται, τετυμμαι*. It is also a habit of this language to interchange *ν* and *σ*, so that the enclitic pronoun may possibly be disguised in the final consonant of the dual forms *τυπτ-ομεθον, -εσθον, -εσθην*; as also in *ετυπτ-ομην, ετετυμμην, ετυψαμην*. But these ideas are of too shadowy

a nature to build upon; nor need we look for additional support after the evidence that has been found in the Latin, Slavonic, Lithuanian, and Scandinavian languages. Yet it may be pointed out that in Greek also there crop up every now and then instances of the use of the reflective pronoun in reference to other than third persons. Thus *ἐαυτοὺς* is said to be an undoubted reading in Plat. Phaed. p. 78, *δεῖ ἡμᾶς ἀνερεσθαι ἐαυτοὺς*; and this construction has the sanction of Timæus (lex. uocum Platoniarum), *Ἐαυτῷ ἐπὶ τρίτου προσώπων, οἱ Ἀττικοὶ δὲ ἐπὶ δευτέρῳ κεχρηναί* (see Buttmann's Gr. Gr. § 127, 3 obs. 5, p. 326); and the same extension of use applies to *σφετερος*. But many of the passages which seemed to support the doctrine that the reflective pronouns of the third person in Greek are in like manner available for the first and second persons, are now corrected or rejected as spurious, as Od. v. 320 (see Buttmann's Lexil. 1. 91, note). There is some approach, but only an approach, to this in the Latin use of *suum quisque* in connection with a first person plural, as, "*Quisque suum patimur manis*" of Vergil, and "*Si in sua quisque nostrum matre familie maiestatem uiri retinere instituisset*" of Livy (34, 2, 1).

It has been assumed that *seb*, or something like it, is the stem of the reflective pronoun; and this theory accounts for the *u* of *su-us* (= *seu-us*), as opposed to the *e* of *me-us*. But it may be further noted that this *seb* is one with the A.-Sax. *sib* 'consanguineus,' an adjective with which our old writers¹⁷⁶⁵, as Piers Plowman, Robert of Gloucester, and Chaucer, are so familiar, and even now Scotch writers. Thus Jamieson gives the derivatives *sib-man* 'kinsman,' and *sibness* 'propinquity of blood.' The old Frisian again had the series of adjectives, *sib* or *sibbe*, comp. *sibber*, sup. *sibbest* or *sibbost*. Add to these our own *gossip*, i. e. *God-sib*, the original use of which was to denote the relation between a godfather or godmother and a godchild.

But if it be admitted that priority of meaning belongs to the reflective, we have yet to account for the use of what was originally a reflective in the new sense of a passive; and let us here begin with establishing the fact that forms which beyond all dispute are reflectives were and are so used. The references to the Slavic family which have already been given seem sufficient

to clear the proposition of all doubt; but similar evidence is found in all the Romance languages. Thus in Italian, "si loda l'uomo modesto," if literally translated, would rather shock our feelings; but has nothing strange in it if *si loda* be accepted as a passive. Again, "mi se domanda uno scudo" is sheer nonsense, if translated *verbatim* 'a dollar demands itself of me.' So too none but a passive translation can give a tolerable meaning to the French phrases: "Le Français se parle par toute l'Europe;" "Comment se fait cela?" "Ce mot-là, comment s'écrit-il?" "Des bas se vendent ici." For Spanish I opened a small edition of Don Quixote (Antwerp, 1719) at random, and found in a single page (94) eight examples of a reflective verb so used; but I will quote only the last three: "Començóse otra plática," 'another conversation was commenced.' "El reposo se inventó para los blandos cortesanos," 'rest was invented for delicate courtiers.' "Los amores que allí se cuentan de Don Lançarote," 'the love tales which are there recounted of Sir Lancelot.'

For the Portuguese it is enough to quote from Vieyra's Grammar (p. 106): "Louva-se o capitão," 'they praise the captain.' "Vê-se hum homem," 'they see a man.' Very different would be the literal translations, 'the captain praises himself,' 'a man sees himself.'

The German too has of course the same construction of a reflective for a passive; as, "das versteht sich von selbst."

It is beyond all doubt then that phrases which are indisputably in form reflective are on all sides used with passive power; and this alone should induce the authors of our classical grammars to give precedence to the reflective over the passive voice. But there still remains the question how this transition of meaning has been brought about. A passive verb, it may be observed, is somewhat superfluous for language. Where the agent is known, the simplest course is to use the active construction. On the other hand, where the agent is unknown, or where for any reason it is desirable to throw him out of sight, we can always have recourse to some vague phrase, as 'some one did the deed. Thus the Germans use the phrase *man sagt*, the Fr. *on dit*. The real justification of the use of a reflective phrase in a passive sense seems to lie in the fact that there are but few cases where

a man is a sufferer, without having been in some degree himself the cause of such suffering. *Fallor* 'I deceive myself,' may well be used in place of 'I am deceived,' because man is generally indebted more or less to his own carelessness or criminal ignorance for his mistakes. Our own tongue too has a phrase which implies some agency in a man's self towards his own sufferings, when we say 'he got his arm broken in the medley.' None can deny the truth contained in the old verses, celebrated by Porson's translation into Greek :

"Now had these children staid at home or slided on dry ground,
A thousand pounds to one penny they had not all been drowned."

Moreover language abounds in cases where the meaning of a word or phrase is extended beyond the limits first conceived, just as a similar principle pervades the whole domain of mathematics.

It has been often noticed that the Greek middle voice is at times used where the action is not so much directed upon the agent as used in his interest, as though it carried with it the idea *sibi* rather than *se*; and this I suppose is what Buttmann means (§ 89, 1) by the words "Die griechische Sprache . . . braucht die passive Form auch in solchen Verbindungen, wo das Verbum im aktiven Sinn nur eine Nebenbeziehung auf das Subjekt hat (z. B. ich bereite mir eine Wohnung)." But this use is not limited to the Greek reflective. We find it also in the Latin verbs so common in military phraseology, as *aquari*, *frumentari*, *pabulari*, *materiari*, *lignari*, *praedari*; as also in *piscari* 'to supply oneself with,' etc.

In several quotations which have been recently made it will be remembered that the word reciprocal was somewhat carelessly used where reflective was meant. This is the more to be regretted as the term reciprocal in its true sense is often wanted. The idea of reciprocity is clearly meant in the French phrase, which in form however is evidently a reflective, *nous nous battons*. On the same principle we may explain the Greek *μαχομεθα*, the Latin *proeliamur*, *luctamur*, *conviciamur*, *altercamur*; and in a more friendly way, *loquimur*, *fabulamur*, *osculamur*, *suaviamur*. Strictly

speaking, this use should be limited to plural forms; but as usual such limit was soon passed, and the singular *μαχομαι*, *loquor*, etc., easily gained a footing. Many languages share this use of reflective forms with reciprocal power.

Having thus stated in detail the arguments which seem to me to give a true explanation of the reflective and passive verb, I deem it but right to refer to a different theory. In the 'Transactions of the Philological Society for 1865,' p. 293, is a very interesting paper on the passive verbs of the Latin and the Keltic languages by Mr. John Rhys, now I believe a Fellow of Jesus College, Oxford, in which he makes out a strong case for the view that the so-called passive impersonal, as *monet-ur*, has in the last syllable a representative of the Welsh *gwr* and Latin *uir*, the form *gwr* in many forms dropping its guttural, as in *pa wr* 'what man,' *ysgrifên-wr* 'pen-man.' The same suffix he finds not merely in our *sail-or*, *writ-er*, but also in the Latin *script-or* and *peccat-or* compared with the Welsh *pechad-wr*, the Greek *ῥήτ-ηρ* and *ῥήτ-ωρ*, and the S. *dat-ri* or *dat-ar*. So far I am and have long been with him. His theory would be altogether satisfactory as an explanation of the impersonal *dicit-ur* = 'man sagt,' although the Romans must themselves have taken a different view, when they proceeded from such a form to the passive *uentum est*. But I find no force in his argument that *se* as a pronoun of the third person cannot be available for explaining verbs of the first and second person. It is due however to him to state that there is much that is at least ingenious in his theory (p. 297) that

moneor	=	mone	+	om	+	r	=	on me conseille.
moneris	=	mone	+	si	+	r	=	on te conseille.
monetur	=	mone	+	t	+	ur	=	man rāth uns.
monemur	=	mone	+	mus	+	ur	=	man rāth uns.
monentur	=	mone	+	nt	+	ur	=	one advises them.

In the second person his argument is somewhat lame, as the *s* of *moneris* bears no resemblance to *wr* or *gwr*; and from first to last his theory seems irreconcilable with such fuller phrases as *ego moneor*, *Caesar monetur*, etc. Still for a just estimate of his theory a perusal of his whole paper is necessary.

CHAPTER XVII.

COMPLEMENTARY VERBS: DO THEY EXIST?

THE term "complementary verbs" refers to the commonly adopted theory that in many cases a conjugation is made up from two or three, nay even four, unconnected roots, as *φερω οισω ηνεγκα*; *fero tuli latum*; *be is was*; *aller va irai*. But about the truth of this theory I have serious doubts; and I propose therefore to consider the cases in detail.

1. *Be, is, was*; *esse, fui*, etc.

Bopp and his followers, probably without exception, hold that "Sanskrit and the larger part of its sister languages have two roots for the verb-substantive, viz. *भू* *bū*, and *अस्* *as*" (V. G. § 509 or vol. ii. p. 372). Then Grimm tells us that "the Gothic 'hulfswort' corresponding to *esse*, is made up of three items: (a) praes. ind. sing. *im is ist*; (β) praes. ind. d. *siju sijuts* (?); pl. *sijum sijup sind*; (γ) a pret. borrowed from *risan*, viz. *ras*, etc.;" and that in O. Germ. the conjugation of the same consists, according to him, of four stems: (a) 3rd sing. pres. *ist*; (β) inf. *sín*, etc.; (γ) 1st. sing. pres. *pim* (*bim pin bin*), 2nd *pist* (*bist*); 1st pl. *pirumes*, 2nd *pirut*; (δ) inf. *wesan*; imp. *wis*; praet. *was wári was, warmer warut warn*, etc.

That Grimm should separate such a form as *ist* (= L. *est*) from *sind* (= L. *sunt*) is somewhat strange, seeing that Varro makes *es-t* and *sunt* for *es-unt* of the same stock; but there are still left our own three forms *be is* and *was*, as representatives of apparently three unrelated roots. But I proceed first to show that the form *be* has lost a final sibilant, originally appearing in the

forms *bis*, *bes* or *bez*. Thus already in O. Germ. the form *pirumes* (*birumes*) points to an older *pis-umes* (*bis-umes*), just as in the same language the preterite *wâr-amês* points to an older *wâs-umes*, ending like the Dor. *τυπτ-ομες* and the L. *uolumus*, (*e*)*sumus*. The Keltic family corroborates this; the Breton, for example, having an inf. *bez-a* 'to be,' corresponding in suffix to *kan-a* 'to sing'; while the pres. ind. runs: *béz-ann*, *béz-ez*, *bez*; pl. *béz-omp*, *béz-it*, *béz-oñt*, by the side of *kan-ann*, *kan-ez*, *kân*; pl. *kan-omp*, *kan-it*, *kan-oñt*; and again in the fut. *béz-inn*, *béz-i*, *béz-o*; pl. *béz-imp*, *béz-ot*, *bez-int*, with a corresponding tense from *kana*. Thus we cannot escape from the result that *bez* is the real stem of the Breton verb; and its identity with our own *be* becomes an absolute certainty, when we find the Breton often possessed of duplicate forms, one with and one without the sibilant. Thus the inf. *béz-a* (itself a corruption of *béz-an*) appears in the dialect of Tréguier as *bé-an*, and in Cornouailles as *bé-a*. So also 'ye will be' is expressed indifferently by *béz-ot* or *bi-ot*; and the conditional has running throughout a twofold form: *biz-enn*, *biz-ez*, *biz-é*; pl. *biz-emp*, *biz-e'h*, *biz-ent*, or, *bi-enn*, *bi-ez*, *bi-é*; pl. *bi-emp*, *bi-e'ch*, *bi-ént*.

The Gaelic also bears evidence that the root had for its final letter, not indeed an *s*, but what is most closely allied to it, a dental aspirate. The present it is true has *bi mi*, *bi thu*, *bi se*, etc.; yet, when we compare the fut. *bithid mi*, *bithid tu*, *bithid se*, with the fut. of *buail* 'strike,' viz. *buailidh mi*, *buailidh tu*, *buailidh se*, we are compelled to conclude that *bith* is the stem of the substantive-verb. Again, in O'Brien's 'Irish Grammar,' it will be enough to quote the archaic form of the indicative present, *bidhim bidher bidhín*, etc.; and again *bidhim* is at times reduced to *bíom*. The Welsh appears to have several forms of the present tense, the fullest of which is *byz-wyf*, *byz-wit*, *byz-yw*; *byz-ym*, *byz-ych*, *byz-ynt*; and the imperfect also exhibits *byz* as the initial syllable throughout.

But I find evidence in a very different quarter, which for me has its value, although I am fully conscious that it will not be acceptable to many. Gabelenz tells us that in Mantchoo, whereas the verb *khóacha*, to take that as an example, has an

inf. *khóachame*, an imperat. *khóacha*, and a fut. *khóachara*, the substantive-verb runs, *bi-me*, *bis-on^{te}*, and *bis-ére*; and in this evidence it is important to recollect that in Mantchoo, even more than in the Keltic, the assimilation of vowels holds good, so that the suffixes *ara* of the one verb, *ire* of the other, are consistent with each other.

I take next into consideration the forms E. *was* and G. *war*, and first point out that the *a* is no stumbling-block, as it is the special character of the tense as a preterite. For example, the inf. of the G. *les-en* 'to read' is *er las*; and thus a pret. *was* rather suggests than not an inf. *wes-en*; and this word still stands in the German vocabulary, but called a neut. sb. signifying 'existence.' Again the Gothic inf. corresponding to the pret. *var* was *ris-an*, to the vowel of which no objection can be taken. Thus the one question left is whether the *b* of *bis* (*bez*) could interchange with a *v* or *w*; and to dispute this would be simply idle, seeing that *βιωη* is admittedly the same word with *uīta*; and without this the joke would be lost for the old epigram:

"Haud temere antiquas mutat Vasconia uoces,
Cui nihil est aliud uiuere quam bibere."

The last question is, whether a root *es* (as in *est*, (*e*)*sumus*, etc.) can be one with a root *wes*, as in the G. *wes-en*; or again, whether the *er* of *eram ero* can be one with O. Norse *ver* of (*vera* 'to be'); and here again any discussion would be a waste of words, as in all languages the change is familiar. For the Greek the word digamma suggests a host of examples; and in our own island we cut down *will* and *would* to 'll and a mere *d*: 'I'll tell him' or 'I'd tell him my mind.' So with the digammatised *one* goes an adv. *only*; and with not a few the word *woman* is reduced to 'oman. But even an initial *b* is apt to vanish. Thus *buro* as seen in *com-buro am-buro* and implied in *bustum*, and again supported by the G. *br-ennen* and E. *bur-n*, appears without a *b* in *uro*; and with a virtual *w* in *oes-trum*. Compare also *Vesta* and *Vescuus*. *Bedo* again, as seen in *am-bedo* and again supported by the G. *bissen*, E. *bite*, very commonly shows itself without any

initial consonant, as *ědo*, S. *ad-mi*, Lith. *ed-mi*. Again *ire* 'to go' succeeded an older verb with an initial *b*, as in the Plautian compounds *per-bitere*, etc. See also *aller vais*, etc., below. For our own tongue then the evidence seems decisive; but how about the Lat. *fu* of *fui fuam*, which exhibits a different consonant and a different vowel? As regards the consonant, Rask's law calls for a L. *f* as an analogue of an English *b*, witness *brother*=*frater*, *break*=*frango*; and indeed it is agreed on all hands that the L. *fu-* is one with the S. *bhu* and our *be*. Still the difference ought not to be passed over; and I say this although unable myself to account for the vowel. Still I observe that in the Welsh preterite *bu-ryf* or *bum*, *buost*, *bu*, etc. and the fuller *buaïs buaist bues*, the form *bu* is regularly installed; and again a comparison of the past imperf. *oeddwn oedd-it oedd* with the past perf. *bu-oeddyn*, *bu-oeddit*, *bu-oeddaï*, shows that the Welsh formation of the latter tense exactly agrees with *fu-eram* as from *eram*.

So far I had written, when, feeling somewhat tired with some five hours' labour at my books, I thought it prudent, being now in my seventy-fifth year, to end my day's work. Still I found it impossible to turn the current of ideas; and as I lay on a sofa, the thought suddenly came upon me that the presence of the troublesome *u* was limited in Welsh to the perfect tenses, and nearly so in Latin; and I asked myself whether this fact would supply a clue to the solution of the problem. A Teutonic preterite of the strong class, I called to mind, was formed by reduplication, if we may rely on the Gothic, as the oldest type of such verbs; and as this habit was shared by Latin in its most archaic forms, I assumed that a stem root *ues* would lead to a perfect *uevisi*, or for the old language rather *uevisism* (see p. 152). But such a trisyllabic word, containing the syllabic *is* repeated, would of course be crushed into *uevism*, and so eventually bring us to *ueui*, a perfect which fairly corresponds to the familiar form *dedi*. But in *ueui* we have what is all but one with *fui*, and still nearer to *fūi*, i.e. the older form of the word, as in the ugly hexameter of Ennius in Gellius (12, 4, 4): "*Partem fuisset de summis rebus regundis*;" but I do not rely upon what Varro says (l. l. 9,60): "*In prae-*

teritis *u* dicimus longum *plūit lūit*, in praesenti breve *plūit lūit*," because the perfect *plūit* is abbreviated from *plūuit*; but *fūi*, as above explained, is not to be classed with the vowel-verbs *amavit*, etc. Thus the sole difference between *ueui* and *fūi* is that between a digamma and the consonant *f*. Compare then *Frηγ- Fray-*, which L. and S. put forward as the theme of *ῥηγνμι*, with the *frag* of the Latin *frango*, where we see the same consonants treated as interconvertible.

It was assumed in the first chapter that *esse* 'to eat' and *esse* 'to be' were the same word; and that the idea of 'eating' had precedence in time. This doctrine will receive support, if it be shown that the same idea presents itself in the several varieties, which begin with a *b*, with *v* (*w*), or have no initial consonant. Thus the Gr. has *εδω* and *εσθ-ω* (in which *θ* is ex-crescent); Lat. *ēdo* with a noun *esca*; the German *essen**, with a third person *er isst*, identical in sound with *er ist*; E. *eat*; S. *ad*; Lith. *ed-mi*; secondly, L. *bedo* in *ambedo*, Goth. *beit-an*, G. *biss en*, E. *bite*; together with words which denote habitual eating or life, as Gr. *βεομαι* 'I shall live,' Manx *be-agh*, Gr. *βιο-ω* (stem *βι-οχ*?) together with the names for living creatures, as L. *best-ia* and *bel-ua*, in the latter of which the *l* has probably superseded a *d* according to the habit of the language; thirdly, *uescor* (stem *ues-ee-*), which like the Manx *be-agh* is chiefly used of habitual eating, as *lacte uescuntur*; *uisc-us* 'meat.' † Lastly, for *uiuo* see p. 18.

2. *Fero, tuli, latus.*

The mixture here seems to have arisen from a twofold variety of the same root in S., viz. *bhri* and *dhri*, or as some prefer *bhar*

* The G. participle *ge-gess-en* 'eaten' in the *g* of the stem-syllable has what commonly corresponds to the *u-consonans* seen in *ues-c-or*.

† The ordinary translation of *uiscera* as 'entrails' is for the older language utterly wrong; it should be 'flesh,' 'meat.' Thus the note of Servius on Verg. A. 6, 253, is: "non exta dicit sed *carnes*, nam uiscera sunt quidquid inter ossa et cutem est;" and again *enuiscero* is never 'to disembowel,' but 'to clear of flesh,' as when Vergil says: *accipiter . . columbam . . eniscerat*; for the habit of the hawk is to eat the flesh only, chiefly that of the breast.

and *dhar*, which stand to each other much as the Gr. *φλαω* and *θλαω*; and again the A.-Sax. *ƿol* as seen in *ƿol-ian* 'to suffer,' *ƿolung* 'suffering,' serves as an intermediate link between the S. *dhar* and the Lat. *tol* of *tollo tetuli*, the interchange between an *r* and an *l* being well known. This *tollo* however in all probability represents an older *tol-io*, which again has its counterpart in the A.-S. *ƿol-i-an*, itself corrupted from *ƿol-ig-an*, as that from *ƿol-ag-an*, with its present tense *ƿolige ƿolast ƿolað*, corresponding to the theoretic *ταλαω ταλας ταλα* by the side of which we have the existing forms *τληναι, τληθι, τετληκα, and τλητος*, together with the noun *τολ-μη* and the adj. *ταλ-as*. Thus there can be no doubt that *latus* has been with reason accepted as the analogue of *τλητος*. The Homeric *φερ-η-σι* with the L. *fretus* for *fer-ec-tus* also have the remnant of the same suffix that we have seen in *τλητος latus ƿol-ig-an*; as also our own *bring* for *ber-ing*, with the perf. *br-ough-t*, in G. *br-ach-te*.

3. Φερω, οισω, ηνεγκα, or ηνεικα.

The diphthong of *οισω*, like the same in *οινος οικος*, may be accepted as standing for *ƿι*, and then *ƿις*, differs indeed from *φερ*, but not much more than *μω* of *μισθ-ος* from *mer* of *mereo merces mercennarius*, or than *ις* of *γελ-ις, pulvis, cinis*, from the *er* of *scribere pulver-is cineris*; and this admitted, the remaining interchange of *φ* with *ƿ* is what has already been recently considered in p. 215. *Ηνεγκα* or *ηνεικα* is commonly referred to a lost present *εν-εγκ-ω* or *ενεικω*; but these two forms, *εγκ* and *εκ*, are only varieties of the very suffix which we were dealing with but now in *φερησι, frctus*, and E. *bring*, so that *εν* alone belongs to the root; and then assuming an initial digamma we come almost to a form *φεν*, which differs it is true from *φερ*, but only in a tolerable degree; and certainly not so much as *tol* does. See too the next section.

4. Αίρω, είλον, ελεγχω, arguo.

I purposely throw these words together as being of the same kin. The primary idea is of course 'grasp' 'catch.' In *εγχ* of *ελ-εγχ-ω* we have another variety of the same suffix which we

were this moment considering, and the absence of the aspirate is explained by the presence of a following χ . The identity of meaning in *arguo* and $\epsilon\lambda\epsilon\gamma\chi\omega$ is striking; nor less striking is the fact that $\epsilon\lambda\epsilon\gamma\chi\omega$ and $\alpha\acute{\iota}\rho\epsilon\omega$ share the two senses of 'convicting' and 'conquering,' *i. e.* 'having a person in one's clutches.'

5. $\epsilon\rho\chi\omicron\mu\alpha\iota$, $\epsilon\lambda\epsilon\upsilon\sigma\omicron\mu\alpha\iota$, $\epsilon\lambda\eta\lambda\upsilon\theta\alpha$, $\eta\lambda\theta\omicron\nu$, $\eta\nu\theta\omicron\nu$.

We are here called upon to compare $\epsilon\rho\text{-}\nu\chi$ and $\epsilon\lambda\text{-}\nu\theta$; and I have first to observe that the interchange of the aspirates χ and θ , as generally of aspirates, is a thoroughly familiar fact, especially in Greek. In the present case I may quote the Doric $\omicron\rho\nu\chi\omicron\varsigma$ by the side of $\omicron\rho\nu\theta\omicron\varsigma$; and in both these cases the guttural seems to claim priority of possession. Again as ρ and χ , formed alike at the back of the mouth, have a natural affinity, so also λ ν and θ , as formed near the teeth. The assumed suffix $\nu\chi$ of $\epsilon\rho\chi\omicron\mu\alpha\iota$, like the $\nu\chi$ of $\omicron\rho\text{-}\nu\sigma\sigma\omega$ $\omicron\rho\nu\chi\eta$, is well suited to such a verb of continuous action. The simple root was probably $\acute{\epsilon}\rho$ or $\acute{\omicron}\rho$, corresponding to the S. *sar* or *sri*, 'go,' whence $\acute{\epsilon}\rho(\epsilon)\pi\text{-}\omega$, S. *sar-p*; the loss of the aspirate being due to the following χ . Nor is this inconsistent with the meaning 'creep' of $\acute{\epsilon}\rho\pi\omega$, for, as has been already remarked, when a word takes two different forms, it is not rare for the applications to differ.

6. $\acute{\omicron}\rho\alpha\omega$, $\epsilon\acute{\iota}\delta\omicron\nu$, $\iota\sigma\eta\mu\iota$, $\iota\sigma\tau\omega\rho$.

The fullest form of this root, setting aside suffixes, I seem to find in the Breton *gouz-out* 'to know;' but in meaning the kindred idea of 'seeing' had probably precedence. This verb, as has been already observed, has the habit of exchanging *gouz* for *gwez*, whenever the next syllable contains an *i* or an *e*; and hence there can be no hesitation in claiming as one in origin with it $\text{F}\iota\sigma\eta\mu\iota$, for which Kidd, in Dawes's Misc. p. 271, claims the digamma on Homeric evidence (I say this, because I do not find the point noticed in L. and S.); also $\text{F}\iota\sigma\tau\omega\rho$ or $\iota\sigma\tau\omega\rho$, our *wise wisdom*, and the G. *wissen*; and then, passing from the sibilant to the other dentals, the Gr. $\text{F}\iota\delta\mu\epsilon\nu$, $\text{F}\iota\delta$ of $\epsilon\acute{\iota}\delta\omicron\nu$, *uid-eo*, E. *wit* and *wot*. But a sibilant readily gives place to an *r*, and

so we find the Fr. *gare* 'look out;' and the G. *wahr-en*, E. *ware*, *aware*. In the next place an *r* often throws out a *d*; and so we come to Fr. *guard-er*, E. *guard*; and it is well here to remember that 'to look' was the primary meaning of these words, as still in our *regard* and in the heraldic language, *lion gardant*, *regardant*. Indeed the two notions are closely united, and hence we find *tueor* with the one meaning, *intueor* with the other; so also with *seruo* and *obseruo*. 'Opaw has an aspirate which may well have grown out of an original guttural, as in *gouz-out* and *gare*; but an aspirate has not uncommonly replaced a digamma. The final *a* of *ôp-a* is again a fitting suffix for a verb of duration. Those who like to compare *ôp-aw* directly with *εἶδον* *Fiδμεν* and *uideo* may see the exchange of an *r* and *d* in *forare* and *fodere*, as also in several pairs of words already brought forward. *Οψομαι*, *οπτηρ*, *οπτικος* the of course one in origin with L. *oculus*, Slav. *oco*; and as *οψομαι* is habitually used as the future of *ôpaw*, it is in all probability of the same stock, a guttural superseding the original sibilant, or perhaps the converse.

7. *Go, went; aller, vais, irai.*

The oldest form of the verb *go* in our own language is *gang*, and this agrees with the G. *geh-en ge-gang-en*, while the S. has *gam* (172, Wilson), and lastly the Gothic present runs *gam gas gat*. Starting then from *gang* we may, without looking at results, expect the initial consonant to pass into a *w* and then vanish; and on the other hand the final *ng* to exchange its guttural nasal with the dental sound *nd* and the labial *mb*. Accordingly we find E. *wend*, *went*, and *wand-er*, the latter entitled by its meaning to the iterative suffix; also G. *wand-er-n* and *wand-el-n*; Dan. *vandre* and Sw. *vandra* 'to walk;' and Ital. *and-a-re*. Then in the labial variety we have E. *amb-le* and L. *amb-ul-a-re*. So far we have the nasal for the most part strengthened by an excrescent consonant; but the Sanskrit has the form *phan* 'go' (185, Wilson), all but one with *βav* of *βαυω*, whence, with the familiar substitution in Greek of a *θ* for *ν*, *βαθ-μος* and *βαθ-πος*, while the German has *bahn* 'a path;' and then the Neapolitan dialect prefers *anare* to *andare*. But for this

verb the French has as its representative *all-cr*,* herein following the analogy of L. *calco* and *cando* (*in-cendo*, etc.); *polleo* and *pondus*, *pendo*; *māla* and *mando*, *scāla* and *scando*, *palam* and *pando*; as also G. *stellen* by the side of our *stand*. Compare too *unda* with G. *welle*. The same liquid sound enters into the obsolete G. *wall-en* 'to go,' as "Schon wall' ich auf der Bahn die uns zu Ehre leitet" (quoted by Campe). The German still preserves the same in *wall-cr* 'a rambler' and *wall-fahrt* 'pilgrimage,' while we also have it in our *wal-k*. The limitation of meaning seen in *walk*, as likewise in L. *ambula-re*, G. *wandeln*, Dan. *vandre*, agrees with *go*, in the 'Frere's Tale':

"Somtime like a man, or like an ape,
Or like an angel, can I ride or go."

As in Latin *nd* and *d* are interchanged, for example in *tundo* and *tutudi*, and again in the Greek *ἀνδανω* and *ἄδω*, so to the Dan. *vandre* corresponds a L. *uad-ere*, whence the It. *vado*, or contracted *vo*; and the same loss of the *d* is seen in *vai ra* and the pl. *vanno*, corresponding to the Fr. *vais vas va* and *vont*, whereas in the first and second persons pl. the one language has *andiamo andate*, the other *allons allez*. The question here arises, why the initial *v* has not been retained in these forms, or why it has not been dropped in the others; and I think the answer to the question is, that short forms, because of their shortness, can ill spare a letter, just as a short man always holds himself more erect on that account; and we have a parallel case, in the present of *habeo* as it appears in Italian: *ho hai ha abbiamo avete hanno*, and again in the declension of the L. *is ea id*, which, originally one with *hic haec hoc*, except that the latter has added a suffix *ce*, retained the *h* often in the monosyllabic forms as nom. *his*, nom. pl. *hi*, dat. and abl. pl. *his*. Unhappily it is the habit of editors to reject these forms, where the idiom of the language seems to require a case of *is ea id*, rather than one of *hic haec hoc*. Yet the Bembine MS. has *his* in Andr. 5, 4, 32; Eun. 1, 2, 125; Ph. 2, 4, 21 (for when editors report *his* as the reading, it is simply because they fail to see that

* *Galeria*, *galerie*, *gallery* 'lit. 'a walk,' retain the original *g*.

what they take for a *k* was really meant for an *h*); while in Ovid's 'Fasti' (5, 484) we find, "His sensus uerbi, uis ea uocis erat" (where *is* would be admissible, but not *hic*).^{*} But I return to our verb *uado* to observe that *waden* 'to go' (not unlike the Goth. *wat-an*) occurs as a provincial variety in the 'Niederdeutsche geistliche Lieder und Sprüche aus dem Münsterlande,' edited by B. Hölcher of Münster (see Kühn's 'Zeitschrift,' vol. iv. p. 227). Again βαδ-ίζω has all but the same form of the stem. In βαυω again we are brought very near to the archaic *L. baetere*, which in compounds exchanges as usual its diphthong for a long *i*, as in *perbitere*, etc. But yet another labial presents itself, as first in *mon* of the Breton, inf. *mon-t*,† and in the Fr. *men-er* 'cause to go,' and again in *mit* of *mittere*, Fr. *mettre*, of like meaning, 'let go,' 'send'; and thus the now well established *per-mit-ies* 'destruction' appears to have the same meaning with *perbitere*. Add also the Greek root *μολ* of *βλωσκω*, *εμολον*, and *αυτομολος*. I have before spoken of the passage from *bat* or *bit* of *baetere*, to *it*, as in *it-er*, etc., and eventually to a mere *i* as in *ire*, or a mere *e* as in *eo*. The same two vowels with a preceding aspirate represent our root in the reduplicated *ιημι*, etc., and this aspirate probably grew out of a digamma. Thus *mitto* and *ιημι* are one in origin as they are one in meaning. Lastly, it may be noted that, as regards the loss of final consonant, to the Gothic *ga*, and Ital. or Fr. *va* corresponds a short Greek form *βα* from *βαυω*, as in *βα-τε* of Aeschylus, to say nothing of *εβην*, etc.

* Add: "ea aetate hisque honoribus actis," Liv. 3, 35, 3 (so P. M. Harl. 1, Leid. 1); "ea fortuna, his locis, quae . . . geramus bellum," 9, 11, 5 (so P. "et omnes prope Drakenb. codd." says Alschefski).

† The affinity of Breton to Latin is proved in an unmistakable manner by the forms common to both, as *eat* 'let him go,' *eant* 'let them go,' and something approaching to identity in (*éz*) *cont*, 'they go.'

CHAPTER XVIII.

DECLENSION.

WHAT is called declension consists in affixing particles with the power of prepositions to nouns, with the further addition of a suffix to denote plurality. Now it so happens that the said particles for the most part begin with vowels; and the natural consequence is, that, whereas the consonant-ending stems very generally accept the addition with comparatively little modification, those stems which end in a vowel are apt to suffer more or less compression from the junction of two vowels. Hence it has been found convenient, alike in Greek, Latin, Sanskrit, etc., to break up declension into several heads, depending altogether on the final letter of the noun. Thus we come to a consonant declension, and one for each of the vowels; but in the Latin Grammar the consonant declension and the *i* declension have commonly been thrown into one, called the third, from which some little confusion has resulted.

The order in which for Latin the declensions have been arranged is somewhat arbitrary, and seems to have been determined more by the number of words belonging to the several endings than by any sound principle. The consonant declension might well have had precedence over the rest from the simplicity of its formation, with the one exception of the nominative. But after all the order of the arrangement is of little moment; and it will be enough to define the vowel-ending declensions by the mere names of the vowels in question, as the '*a* declension' and so on. But let us first see how far these names are well adapted for their purpose. Do we really find an *a* running through the

declension so-called? and the answer is at once in the affirmative, with the exception of the dat. and abl. pl.; but here again some nouns also exhibit an *a* in the fuller suffix *abus*, as *equabus*, *mulabus*, *ambabus*, *duabus*. In the *o* declension there is a somewhat greater variety. In the nom. and acc. singular we find a *u* commonly, where we should desire to find an *o*, which after all constitutes no great difference; and even here we have *seruos* and *aeuom* rather than *seruus* and *aeuum*. The question brings with it a graver difficulty in the gen. *serui*; yet again we may appeal to *quo-ius*, and virtually to *nullius*, as representing an older *nullo-ius*, corresponding to *quo-ius*. *Hu-ius* too has a strong resemblance to the desired *ho-ius*. The dative *nulli* is without an *o*, and the dat. *seruo* without an *i*; and these two vowels are so utterly dissimilar that we cannot assume that they are interchangeable with one another; and hence it is more likely that the original form contained both; that is, that they grew out of a theoretic *nulloi* and *seruoi*; and this is confirmed by the Greek *οικοι* and *οικω*, as also by the Lat. *quoi*. In the nom. and dat. pl. all difficulty is removed by the varieties *oloe* = *illi*, corresponding to *λογοι*, and *oloes* = *illis*. In the *i* declension we have all we could desire in the declension of *avis*, for even in the nom. pl. a variety *avis* is entitled to claim a place, on the evidence of such passages as "Agri poplici quod Langenses posident hisce finis uidentur esse," CIL. 199, 13, and "Liberæ sunt aedis," Plaut. Glor. 3, 1, 84 (for so the MSS.). Lastly, the *u* declension in every case exhibits a *u*, if we include such a form as *acubus*; and so without exception the *e* declension an *e*.

The definition of the declensions by reference to the final letter is so simple in itself, and in such accordance with the habit of Sanskrit grammar, that I take little credit to myself for urging the adoption of it in Latin grammars in the Journal of Education published by the Society for the Diffusion of Knowledge in 1830 (pp. 98-100 and 105). In fact it seems somewhat strange that it should not have been adopted without disguise in the lately published 'Primer.' At any rate it obtained the sanction of Pott in the second edition of his 'Etymologische Forschungen' (s. 225): "Wählte man nun aber in unsern Lehrbüchern auch

das Thema zur Anführung, so würde man daraus die Abwandlungs-Weise aller Casus und Wortbildungsformen für gewöhnlich gewiss viel leichter und sicherer treffen, als bei unserm gegenwärtigen Verfahren, vorausgesetzt dass man die Regeln (z. B. die phonetischen beim Zusammentreffen des Charakter-buchstabens im Thema mit der reinen Nominativ-endung -s) danach sachgemäss einrichte." *

So far I have spoken only of Latin declensions, but the same guiding principle is seen in the Greek vocabulary; so that further remark is scarcely called for, except perhaps as regards those feminines, whose nominatives end in *ω*, as *ἡχώ*, where the real theme is precisely what is seen in the vocative, viz. *ἡχοι*, or else *ἡχῶι*. This was first distinctly pointed out by Ahrens;† although Pott (Et. F. ii. p. 443, first ed.) had already noticed the striking likeness between the voc. of such Greek nouns and that of the S. feminines in *á*, *çivê* for example, seeing that the S. *ê* and Gr. *οι* habitually correspond to each other. Ahrens confirms his theory by adducing numerous examples of nominatives in *ωι* and *οι* from Karl Keil's Repertorium of Inscriptions (Leipz. 1851, vol. iii. p. 125), as *Ἀρτεμῶι*, *Ἀθηνῶι*, *Ἀρχίοι*, *Ναρθοι*; and I cannot but think that Ahrens was hasty when he rejected the confirmatory evidence of Choeroboscus (p. 1202, Bekk.): *εὐρισκεται καὶ ἀλλῇ αἰτιατικῇ εἰς οὖν, ὅιον τὴν Λητοῖν καὶ τὴν Σαπφῶιν, ἥτις Ἰωνικὴ ἐστίν*. I am disposed to add to what is there said, that here again, as in Latin nouns, there was an earlier and fuller suffix in *ικ*, that is the very suffix which is employed in Latin to form a feminine from nouns in *or*, as *uictor*-, *uict-ic*-; and in proof of the proposition I point to *γυνή* and its voc. *γυναι*, while the oblique cases give the form *γυναι-ικ*-; and would even contend that the notion of 'woman' is given only by the addition of the suffix *ικ*, *γυναι* in itself being one with the O. Norse *gumi* 'man' (cf. the G. *bräuti-gam*).

The affixes which constitute declension, it was just said,

* And he goes on to say: "Vgl. mit Bezug auf das Latein die lobenswerthe Neuerung in: 'A Latin Grammar,' by T. Hewitt Key."

† In the second number of Kuhn's 'Zeitschrift,' October 22, 1853. See the paper as translated in the Proc. of the Philolog. Soc., vol. vi. p. 155.

include particles with the power of prepositions; and as the primary office of prepositions is to denote the relations of place in connection with motion or rest, the same power will be found to reside in case-endings. Thus the so-called nominative, the genitive, and the true ablative denote the 'whence,' the accusative the 'whither,' the dative the 'where.' The true vocative (for we must not give this name to the nominative, when used as a vocative) contains the base of the noun alone, though often indeed slightly modified; and consequently it is not a case in the sense belonging to the other forms. But while the five cases just enumerated are all that are known to the Latin language, and indeed only four of them to the Greek, more are found in other languages. Thus Sanskrit grammarians speak of cases under the names 'instrumental' and 'locative,' the former carrying with it the notion of 'with,' the latter all but one with the so-called dative; and in the Tatar family of languages we find a still larger crop; Vhael, for example, claiming for the Finn language cases called privative, negative, factitive, nuncupative, penetrative, and descriptive. Nor is this in any way surprising, for as was just said, there is no substantial distinction between a preposition and a case-ending; and prepositions are of course often numerous. Even in respect of position, what we commonly call prepositions in Greek and Latin are often found following their nouns, as in *mecum*, *quoad*, *qua de re*, *quamobrem*, τῷ ἐν ἡμῶν Νατιν, and so on; and in the Tatar family the ordinary place of such particles is after the noun, so that their grammarians have found it necessary to substitute the term 'post-position'; and indeed this arrangement seems better suited for the purpose. Nor let it be said that a case-ending is distinguished from the preposition or postposition by the fact of its being immediately attached to the noun; for not only are we familiar with such forms as those just quoted, *mecum*, *quoad*, but the question is rather how words are pronounced than how they are presented to the eye; and certainly in speech there prevails the habit of closely connecting such particles with their nouns. However we may write it, *at home* is for the ear as thoroughly one word as the Latin *domi* or the Gr. οἴκου. Moreover, in

inscriptions and manuscripts it is anything but rare to find them so united. Thus in the index to the first volume of Mommsen's 'Corpus Inscriptionum' there are references to more than a hundred instances under the heading 'Vocabula scribendo coniuncta.' It is true that case-endings are generally in a more corrupt form than prepositions; but this is probably due to the fact that the practice of prefixing such particles is of later date, so that they have not been exposed to degradation for the same amount of time; yet even as it is, we have already reduced the prepositions *of* and *on* in *two o'clock*, *aboard*, *afoot*, *across*, *for on board*, etc.

I go back to the several cases to justify my assertion as to their original power. To the nominative, as was already stated in the first chapter, I assign the notion of 'whence'; and I mean here the whence or source of the action, in other words, the agent; for it will be recollected that for the oldest forms of language I limited the term "verb" to verbs of action. But here it may be, and indeed has been objected, that my definition is inconsistent with the use of the nominative with a passive verb, as the nominative then denotes, not the agent, but the patient. But the answer to this objection has already been given in p. 20.

But the genitive also was said to denote 'whence'; but here the distinction lies, that while the nominative had for its special office to denote the whence of the action, the genitive attaches itself for the most part to substantives, as *calor solis* 'the heat proceeding from the sun,' 'the heat of the sun,' where *of* = *off*. The power here assigned to the genitive will explain at once a large number of the uses of this case in the classical languages, as for example with the Gr. prepositions *απο* and *ἐξ* in all cases, and in *παπα Κυρου* 'from the presence of Cyrus,' as opposed to *παπα Κυρω* 'in his presence,' and *παπα Κυρον* 'to his presence'; where the case-endings belong not so much to the simple noun *Κυρο*- as to the compound form *παπα-Κυρο*-. Again a leading use of the genitive is that called 'partitive,' but might more fitly be called 'totive,' for the genitive here denotes the whole whence a part is taken. Even the construction of the so-called objective genitive, in not a few of its uses, is consistent with the idea of whence. Thus *amor tui*, *odium tui*, is the love or hatred which

originates in qualities belonging to 'you'; and we must not be misled by the fact that the idea agrees with that of *amo te, odi te*, for verbs of feeling at the outset claimed a genitive, not an accusative. So *imago tui* is strictly 'a picture drawn from you.'

The accusative may be taken next; and certainly, if the nominative denote the 'whence' in *dominus servum caedit*, the accusative denotes the 'whither'; and here again the definition is well suited to explain the leading uses of the case so-called, as *eo Romam* or *domum*, *eo lautum*, and *in urbem*, as opposed to *in urbe*, *sub oculos venire* as opposed to *sub oculis esse*, and the factitive use, as in *Ancum Marcium regem populus creavit*, or *δερω σε θυλακον* 'flay you into a leather bag,' especially when compared with the German *Sie wählen ihn zum Führer*, and our own phrase *he took her to wife*. The term 'accusative' probably arose from the language of the law courts, where, as the plaintiff is the agent, so the accused is the party against whom the action is directed, the 'accusatus.' But be this as it may, Varro (l. 1, 8, 6; p. 404 Sp.) defines this case precisely as is here done, in the words, *quo vocetur, ut Herculem* (so MS. B), or *ad Herculem*.

The word dative has been most unhappily chosen, as the use of this case with verbs of 'giving' at best belongs to a very limited portion of its duties; and indeed we might with equal propriety call it the 'ereptive' case, seeing that 'sicam tibi e manu eripui,' stands on a level with 'sicam tibi in manum dedi.' A better term would have been 'locative,' or some term to denote 'where.' Indeed this very term, locative, is so employed in the grammars of Sanskrit, Zend, and Lithuanian; while Bopp (§ 195) connects therewith the Sanskrit locative the Greek datives of place *Δωδώνι οἶκοι χαμαί*, and the use of the same case in definitions of the time 'when,' as *νυκτί, τῇ αὐτῇ ἡμέρᾳ*; and in his table of locatives, as given in § 203, seems to include all datives, as *ἔμπρο, χώρα, φέροντι*, etc. Nay, in § 329 he says expressly, 'in Sanskrit the locative very often supplies the place of the dative.' The identity of the so-called locative with the dative seems further to be proved by the great similarity of the forms. The instrumental again, alike by meaning and form, seems also to claim an intimate connection with the dative. As

regards meaning, one of the leading uses of the Greek dative (s. Matthiae Gr. § 397) is in answer to the question ‘wherewith,’ or to denote an ‘instrument or mean;’ and it is also employed in the sense of ‘wherewith’ of a society or companionship, as with *συν* and *ἀμα*; and in § 401 the same writer so explains the use of the dative with *χρησθαι*. On the other hand, Bopp, while claiming the old German *hiutu* for *hiu-tagu* ‘an diesem Tage, heute’ as an instrumental in form, admits that in meaning it is ‘locative,’ just as the Gothic *himma-daga* is an indisputable dative. Then as to form, *vāg-bhyām*, the dual instr. from *vāch* = L. *voc* (n. *vox*), and the pl. instr. *vāg-bhis*, exhibit a marked likeness to the terminations of the L. datives *nobis*, *vobis*. Add to this that the S. grammarians themselves lay down that the dual *vāg-bhy-ām* does duty alike for an instrumental and a dative.

But the dative has also much in common with the ablative, at least in form and use; and this not merely in Latin, where for the plural the two cases absolutely coalesce, and to a great extent in the singular also, as *seruo*, *navi*, *gradu*, and *fide*; but also in the dual and plural of Sanskrit. In the old L. ablative we find a final *d*, which sufficiently distinguishes it in form from the dative; but still, besides the ablative construction *Gnaiuod patre prognatus* CIL. 30, *de praidad*, *ibid.* 63 and 64, and the thrice repeated *de sententia* 196, there occur in the same Baecanian inscription such phrases as *in oquoltod*, *in preiuatod*, *in conentioned*. Again, after this final *d* had vanished, the same confusion survived in ‘Corintho fugit,’ ‘tuos culpa libero,’ and as attached to the prepositions *ab*, *e*, and *de* the notion of the ablative is still seen; but not in its use with the prepositions *in*, *cum*, *sub*, etc., or in the phrases of time ‘when’ as *codem tempore*. But here the solution of the difficulties may take two forms. First, I would observe, that as soon as a second preposition is prefixed as a sort of rival, the power of the case-ending ceased to be of importance, as it now played in most cases a subordinate part. Hence the time came when it was deemed of little moment what case followed a preposition, so that *cum* might even take an acc.: as, “*cum quem uixit annis xx*,” Orel. inscr. 4659; and lastly, as a natural result the case-ending wore away entirely.

The tendency to throw off case-endings, or even to employ the light suffix of an accusative for other cases, when a preposition or a preceding pronoun by its case sufficiently marked the relation, is well seen in the O. Prussian, where the strict suffixes of the genitive and dative are then dispensed with. Thus, in *Daiti stesmu Keiserin ka steisei Keiserin ast* 'Give to the Caesar what the Caesar's is,' *stesmu* as a dat. and *steisei* as a gen. of the definite article removed all doubt of the relation; and thus the acc. *Keiserin*, though logically out of place, could cause no ambiguity (Nesselmann's Gr. p. 55). Similarly in the phrase, *sen wirdemmans adder dilans* 'with words or deeds,' the noun *wirdemmans* as a dat. pl. is in agreement with the prep. *sen* (= σνν); but *dilans*, though an acc. pl., is admissible; the relation having been already established in the preceding noun. Precisely in this same way I am disposed to explain the Greek combinations *απο ναυφιν*, *εκ θεοφιν*, holding these nouns in *φιν* to be here as elsewhere datives, and comparing with them our own 'from on board the ship,' the Fr. 'de chez le roi,' and the Gr. *παρα Κυρου*, as just explained.

The plural forms *aris*, *tumulis*, *arboribus*, etc., in our grammars are called alike datives and ablatives, but perhaps they are in fact only datives, as their form suggests, and we have a licence, but one that can cause no errors, in such phrases as *ab aris*, *ex aris*; and so with *in couentionld*, *magno cum murmure*. But the Greek habit was more strict, and to *ειν* and *ειν* a dative only could be attached. Secondly, when the ablative dropped its distinguishing *d* and the dative its distinguishing *i*, there resulted, as I have said, an identity of form, *auro naui gradu fide*. But even in the consonant nouns the long datival *i* was often supplanted by a short *e*, as in *Karthaginī*, *Tiburī*, reduced to *Karthagine*, *Tibure*: and frequently in old inscriptions, as *Marte* CIL. 62, *Imnone* 172; *Dioue* 188, etc. Hence, in the singular also there was room for confusion, so that Lucretius might write: 'E mare primum homines, e terra posset oriri'; and so *de mare*, Ov. Tr. 5, 2, 20; *ibid.* 196; Pont. 4, 6, 46; *cauo in mare*, a. a. 3, 94; in all of which the preposition or adjective removes ambiguity; as also in the other passages quoted by Neue (1, 234).

Admitting then that there remains much obscurity in what concerns the dative, ablative, instrumental, and locative, I shall limit myself in what follows for the most part to the consideration of those cases which find a place in the grammars of the two classical languages, and refer to the other cases only so far as they may be thought to throw light on these. My next business is to deal with the form of the suffixes which belong to the several cases.

An *s* in the nom. shows itself very commonly, but with exceptions, some of which will presently be considered. After a vowel it is generally preserved, as in *o* nouns, or their equivalents in some languages *ā*-nouns, first in *ἵππο-s*, L. *equo-s* or *ecu-s*; S. *αἶψα-s*; Z. *αἶψό*, but with an added *cha* (= L. *que*) *αἶψαχ-cha*, all of like meaning; Lith. *põna-s* 'lord;' f. *ódos*; L. *humus*; *i* nouns, S. *πάτι-s*, Z. *παιτί-s* 'lord;' G. *ποσι-s* 'lord' or 'husband,' L. *hosti-s*, Lith. *genti-s* 'relative,' all m.; and fem. S. *πρίτι-s* 'love,' Z. *ἀφρίτι-s* 'blessing,' *ποπτι-s* 'heifer,' Lith. *awi-s* = L. *oui-s*; *u* nouns, m. S., Lith., and Go. *sūnu-s* 'son;' Z. *παῖς-u* 'tame animal,' *νεκ-u-s*, L. *ictu-s*, and f. S. *hanu-s* = *γενν-s*, Z. *tanu-s* 'body;' Go. *handu-s* = L. *manu-s*; *e* nouns, m.f. *die-s*, f. *re-s*.

In consonant nouns some discrepancy was to be expected, as an added *s* would make pronunciation more difficult. Yet even here the Romans from *urb-*, *adep-*, *reg-*, *nuc-*, *lapid-*, *palud-*, *pariet-*, *uirtut-*, *aetat-*, *hiem-* formed nom. *urbs* or rather *urps*, *adepts*, *rex*, *nux*, *lapis*, *palus*, *paries*, *uirtus*, *aetas*, *hiemps*; in all these cases following pretty closely the analogy which appears in the formation of the perfects: *scripsi*, *rexī*, *duxi*, *diuisi*, *lusi*, *miſi*, *sumpsi*.

Still there are marked exceptions. In the *a* nouns we must turn to Greek names, as *Aeneas*, *Pythias* (in the 'Eunuch') before we find an *s* in this case. Indeed fem. *a* nouns repelled such final *s* with some uniformity, as in S. *αἶψά*, Z. *ἡῖψα* (with *chā*, *ἡῖψās-cha*), Lith. *ashwa*, all = *equa*; and *χωρᾶ*. Still even here, seeing that *σοφία* and *σοφίη* are but dialectic varieties of the same word, we may assume the same for *luxuria luxuries*, in which last the *s* has been preserved. Again, for the masculine, the Greek, besides proper names, has a large class of nouns ending like *ταμίας*, *πολιτής*. Yet even here the old language at

times dropped the σ , as in $\mu\eta\tau\epsilon\tau\alpha$ Zeus, $\acute{\iota}\pi\pi\omicron\tau\alpha$ Νεστωρ. Moreover, so closely are the Greek and Latin languages allied, that what is proved to hold for the one must once have held for the other. Let it be observed too that besides *Archytas*, *Aristagoras*, etc., there existed for Cicero, and indeed were preferred by him, the mutilated forms *Archyta*, *Aristagora*.

But we have to deal with yet other exceptions; and I take the Latin nouns, such as *pater*, *consul*, *ratio(n)*, *ordo(n)*, that I may account for the non-appearance of the suffix *s*. My theory is this, that the *s*, originally added, was first assimilated to the preceding liquid; that by a second change one of these two liquids was dropped, but so dropped that the preceding vowel (if short) by its increased length served to compensate for the loss; and thirdly that this long syllable was in some of the cases eventually deprived of its length. A triple assumption of this kind of course requires strong support; and I trust that the ten parallels about to be produced will be deemed sufficient for the purpose.

1. The four verbs $\sigma\pi\epsilon\iota\rho\omega$ $\sigma\tau\epsilon\lambda\lambda\omega$ $\phi\alpha\iota\nu\omega$ and $\nu\epsilon\mu\omega$, to take these as examples of classes, have for their respective bases $\sigma\pi\epsilon\rho$ $\sigma\tau\epsilon\lambda$ $\phi\alpha\nu$ and $\nu\epsilon\mu$. From these, if the ordinary formation were followed, we should have had as first aorists $\epsilon\sigma\pi\epsilon\rho\sigma\alpha$ $\epsilon\sigma\tau\epsilon\lambda\sigma\alpha$ $\epsilon\phi\alpha\nu\sigma\alpha$ $\epsilon\nu\epsilon\mu\sigma\alpha$; and in fact $\epsilon\kappa\epsilon\rho\sigma\alpha$ $\epsilon\lambda\sigma\alpha$ $\kappa\epsilon\nu\sigma\alpha\iota$ are found in Homer. Assimilation would have changed our theoretic aorists to $\epsilon\sigma\pi\epsilon\rho\rho\alpha$ $\epsilon\sigma\tau\epsilon\lambda\lambda\alpha$ $\epsilon\phi\alpha\nu\alpha$ $\epsilon\nu\epsilon\mu\alpha$. For $\epsilon\sigma\pi\epsilon\rho\rho\alpha$ compare the later Attic $\alpha\rho\rho\eta\nu$ $\theta\alpha\rho\rho\omicron\varsigma$ $\pi\upsilon\rho\rho\omicron\varsigma$ by the side of the older varieties $\alpha\rho\sigma\eta\nu$ $\theta\alpha\rho\sigma\omicron\varsigma$ $\pi\upsilon\rho\sigma\omicron\varsigma$. Next the suppression of one of the liquids together with the usual compensation by increase in the length of the vowel would have given us what is actually found: $\epsilon\sigma\pi\epsilon\iota\rho\alpha$, $\epsilon\sigma\tau\epsilon\iota\lambda\alpha$, $\epsilon\phi\eta\nu\alpha$, $\epsilon\nu\epsilon\iota\mu\alpha$; and here we have again a parallel in the passage from the purer Aeolic, $\epsilon\gamma\epsilon\rho\rho\omega$ $\phi\theta\epsilon\rho\rho\omega$ $\kappa\tau\epsilon\nu\omega$ $\gamma\epsilon\nu\alpha\tau\omicron$ (= $\epsilon\gamma\epsilon\iota\sigma\alpha\tau\omicron$) to the Attic $\epsilon\gamma\epsilon\iota\rho\omega$ $\phi\theta\epsilon\iota\rho\omega$ $\kappa\tau\epsilon\iota\nu\omega$ $\epsilon\gamma\epsilon\iota\nu\alpha\tau\omicron$.

2. As the feminine of adjectives ending in a consonant was often made by the addition of the syllable $\sigma\alpha$, e.g. $\tau\upsilon\pi\tau\omicron\upsilon\sigma\alpha$ $\chi\alpha\rho\iota\epsilon\sigma\sigma\alpha$ $\Phi\omicron\iota\nu\iota\sigma\sigma\alpha$ for $\tau\upsilon\pi\tau\omicron\upsilon\sigma\alpha$ $\chi\alpha\rho\iota\epsilon\nu\tau\sigma\alpha$ $\Phi\omicron\iota\nu\iota\kappa\sigma\alpha$, so $\mu\alpha\kappa\alpha\rho\text{-}\tau\alpha\lambda\alpha\nu\text{-}\tau\epsilon\rho\epsilon\nu\text{-}$ seem to have passed through $\mu\alpha\kappa\alpha\rho\rho\alpha$ $\tau\alpha\lambda\alpha\nu\alpha$ $\tau\epsilon\rho\epsilon\nu\alpha$ to $\mu\alpha\kappa\alpha\iota\rho\alpha$ $\tau\alpha\lambda\alpha\iota\nu\alpha$ $\tau\epsilon\rho\epsilon\iota\nu\alpha$. The doctrine of some Sanskritists, that an ι , as

the symbol of the feminine of gender, was engrafted as it were in the middle of the theme, appears to me a somewhat violent assumption.

3. The Latin superlative ended commonly in *sūmo-* or *sīmo-*, but in *acerrimo-* *detrimento-* *facillimo-* *simillimo-* the *s* has assimilated itself to the preceding liquid.

4. The Latin infinitival suffix *ēre* appears to have grown out of an older *ēse*, as seen in *es-se* 'to be,' for *es-ese*, *dasi* an older variety of *dari*. Hence *uelle nolle malle* have in *le* a substitute for an older *re*, as that was a substitute for *se*.

5. In the old Norse an *r*, instead of an *s*, is the ordinary suffix of the nominative for masculine nouns; but when such nouns end in *n* or *l* the *r* is at times assimilated, so that from the bases *ketil* 'kettle,' *graen* 'green,' *span* 'spoon,' we have the nominatives *ketill graenn spann*. Again, some words which end in *r*, as *dor* 'spear,' are not afraid to take a second *r*, as *dörr*; and if the base ended in *s*, the old language sometimes added a second *s* for the nominative. Thus from *is* 'ice,' *laus* 'loose,' were formed old nom. *iss*, *lauss*. We have here the means of explaining the fact that the *is* of the Latin nom. *pulus* was originally long, as in Vergil's "*et uersa puluis inscribitur hasta*," for as an *s* belongs to the base of this word, as shown by its substitute *r* in the oblique cases *puluer-is*, etc., and by the retention of the sibilant in the dim. *pulus-culus*, it follows that an earlier nom. must have been *puluiss*. However in the later Norse there was a tendency to discard one of the repeated consonants (*rr* or *ss*), the more naturally, as they were without effect upon the ear, and thus the virtual symbol of the case wholly disappeared. In § 139 of Rask's Grammar it will be seen that the nouns which were thus truncated ended in *r l s* and *n*, that is, the very forms which are subject to the same mutilation in Latin. We have thus a simile which really runs on all fours.

6. The old Norse verb in the third person, in accordance with the usual habit, takes an *r* where we prefer an *s*, as from *tel* 'tell' *haun telr* 'he tells;' yet from *skín* 'shine' the old writers preferred *skinn* to *skíur*, and this *skinn* subsequently gave place to *skín* (ib. § 93).

7. The gen. pl. in O. Norse has a regular suffix *'ra* corresponding to the Latin *'rum*, itself a corruption from *'sum*; yet from *hin* 'the' and *gamal* 'old' the gen. pl. are *hinna*, not *hinra*, *gamalla*, not *gamalra* (ib.).

8. The ordinary termination of the definite neut. comp. in the same tongue is *ara* or *ra*, as *kald-ara* 'the colder'; but from *vaen*- 'fair,' *sael*- 'happy,' are formed *vaen-na sael-la* (ib. § 199).

9. In that dialect of the island of Sardinia which prevails in the district of Logudoro the Italian words *carne*, *inferno*, *tornare* have taken the form *carre*, *inferro*, *torrare*.

10. The Latin language is specially apt to discard any final *s* when preceded by an *r*, even though a vowel intervene, as *uidebare uiderere* for *uidebaris uidereris*. Again, although the analogy of the Gr. *δὺς τρις τετρακ-ις*, etc., of the Lat. *bis* (= *duis*), and of our own *twice thrice* might have led us to expect *tris* and *quatrīs* in Latin, yet we find nothing but *ter* and *quater*. Under these circumstances it is no matter for just surprise, if, instead of *paters linteris* and *puerus*, which strict theory demands, we find *pater linter puer*. But the Gr. nominatives *πατήρ χειρ τέρην* exhibit a long vowel or diphthong of compensation, and so also does the Latin more frequently than is commonly believed, as in: "Tíbi patēr (for so the Ambr., not paterque) auósque facilem fécit et planám uiam," Pl. Trin. 3, 2, 19; "Meús fuit patē'r Antimachus, égo uocor Licónides," Aul. 4, 10, 49 (see Wagner), and even the same quantity survived in Vergil, Aen. 5, 521; 11, 469; 12, 13. Nay, *χερς* as a nom. actually occurs in a pentameter of Timocreon's, as quoted in Hephaestion *περι μετρων* l.: *Ὡ συμβουλευειν χερς απο, νους δε παρα*.

The same explanation would apply to *ration-*, *ordōn-*, as coming through an intermediate *rationn*, *ordonn* from an original *rations*, *ordons*; and the final passage to *ratio*, *ordō*, corresponds to *Strabo* from *Στραβων* and *εγω* from an older *εγων*.

Thus with the exception of neuter nouns a nominative *s* may be regarded as having once shown itself in every declension. But how about neuters? Even here an *s* is seen or heard in such adjectives or participles as *felix*, *praesens*, *amans*, and

felt, though not heard, in ἰδωρ, σκωρ, πῦρ, for the long vowel seems inexplicable except on the assumption of a lost final σ. I do not add such words as *tempus* or *onus* because here the *s* is part of the theme, which of course in the oblique cases passes into an *r*, *temporis*, *oneris*, etc.; or *potis*, which is only a corrupted comparative from *potius* or *potios*, so that again the *s* belongs to the theme. The same doctrine that the *s* in *tempus*, *opus* is part of the theme, applies to S. neuters as: *tamas* ‘darkness,’ *apas* (= *opus*) ‘work,’ and to Greek neuters, as, *στηθεσ-οχες-*, the σ of which is accordingly retained in the forms *στηθεσ-φι οχες-φι* as opposed to *βιηφι*, etc.; and in compound adjectives, as *ορεσβιος*, *φαισφορος*. The reason why neuter nouns rarely take a final *s* for the nominative is probably this. The doctrine that the nominative is but another name for agent, involves the further doctrine, that as an agent it must be a living creature, and so either masculine or feminine. Consequently, a neuter noun can make no clear claim to employment as a nominative. As to the *um* of *bellum*, and the *ov* final of Greek neuters, I have already given my reasons for the belief that this *um* grew out of a guttural *umh* (= *ox* or *oc*), that is, a suffix of diminution. Thus the G. *boden* we know to be a corruption of an old G. *botam* or rather *potam*, one with our *bottom*, and this again, a corruption of an older *buttock*. So our *fern* and Germ. *farren* represent an O. G. *varam*, and this again a more genuine, though theoretic, *var-ak*, the guttural of which is still preserved in our *b(a)rake*.

I will not pursue the formation of the nom. through the Greek, Sanskrit, and other languages, being satisfied with the simple fact that a final *s* is ever apt to disappear, and especially when attached to words which already have a final, perhaps more than one final, consonant. The Gothic is a marked exception from other languages, when it tolerates forms like *fisks*, *balgs*. Perhaps too there is a special reason why of all the cases a nominative should be allowed to throw off all trace of a case-suffix, in that by its very position in a sentence its power is marked. Hence in English and several other languages no confusion follows, because it nearly always immediately precedes

the verb, just as the simple accusative very commonly comes directly after the verb.

suffixes

In the accusative the vowel nouns, always with the exception of neuters, exhibit very generally a final nasal, as *ποσιν*, *σοφῆν* or *χωρᾶν*, *ἵππον*, *ἔχθυν*; S. *patim*, *açvām*, *açram*, *sūnum*; L. *turrim*, *diem*, *equam*, *equom* or *ecum*, *socrum*, etc. The Lith. too has a nasal in *pōna-ñ ka-ñ*; and the old Pr. in *packan* or *packun* from *packe*, etc. (Nesselmann, Gr. p. 51); but in consonant nouns we find a vowel before the nasal, as in S. *vách-am*, *bhrátar-am*; L. *uoc-em*, *fratr-em*; Z. *brátar-em*; O. G. *kot-an* 'deum,' *fater-an* 'patrem' (S. Bopp, § 149); but why Bopp (§ 150) should treat the vowel *a* (*e*) of this suffix as a 'Bindevocal' is wholly past my comprehension. In Greek consonant-nouns a mere α_2 as: *οπα πατερα*. From a comparison of these we are led to a form *an* (*av*) as likely to be something nearer to the original; and it can scarcely be an accident that the German preposition *an* has a power well adapted for the case, viz. 'to.' Indeed there is reason for suspecting that for Latin too *an* is an old variety, which led on the one side to the form *ar* (*ar-fuit*, etc.), on the other to *ad*; and that *ant-e* with an excrescent *t* is derived from it (for the meaning cf. *prae-(e)sens*, which in power goes with *ad-esse*); and then again I have contended above that from a secondary *ado* may have come by decapitation a form which reappears in our E. prep. *to*. The connection of the ideas 'before' and 'to' is seen in such a phrase as 'ad iudices ueniemus' (Ter. Ph. 1, 2, 79); and in *προς*, which, as being only the fuller form of *προ*, must first have signified 'before,' though afterwards used commonly for 'to.' One thing I am clear about, that Madvig has allowed himself to be carried away by a wrong theory, when he contends that nominatives and accusatives have no suffix whatever, in fact are not cases (see his 'Bemerkungen,' p. 25 ff. and Mr. Wood's preface to the translation of the Grammar, p. 5). Thus for him the little additions which with others pass for case endings or the remnant of case endings, are merely euphonic additions,* as the *e* in *rete* and *forte*, where it seems to have escaped him that this *e* is the representative, as usual in final syllables, of the *i* which shows itself in *retia retium*, and of *ic* in *retic-ulum*. So

again the *m* or *n* of accusatives, as *consulem urbem*, and of Latin neuters, as *lignum magnum*, is nothing, he says, more than the *ν ἐφελκυστικόν*, so familiar in Greek.

I have said above that a neuter, as not being endowed with life, had no original right to perform duty as a nominative; and further that both nom. and acc., by their very position in a sentence, have their power tolerably well defined, and so might without much detriment have dispensed with case endings. This will account perhaps for neuter accusatives habitually appearing without such vestment; for I hold that *lignum*, to take Madvig's example, is without any case ending, though the *um* happens, by mere accident, to be seen alike in *equum* and *lignum*.

The suffix of the genitive, says Bopp, in Sanskrit appears as *s*, *as*, *syā*, and *ās* (§ 184); and among these he claims *syā* as the fuller form (§ 188); and as examples are quoted *urka-syā* 'lupi,' *aśva-syā* 'equi,' *ta-syā* 'huius,' *ka-syā* 'cuius' (§ 194). Now as regards the last two, I venture to claim the division *tas-ya*, *kas-ya*, holding the *s* to be part of the theme of the pronouns, just as I claim it also in the loc. *tas-min*, *kas-min*, and the dat. *tas-māi*, *kas-māi*. Then as regards the other nouns, I think that the division *urkas-ya*, *aśvas-ya*, so as to leave *ya* alone as the suffix of the case, may be defended on the ground that the theme may claim the *s*, as representing a lost guttural, just as in *herbac-eus*, *sebac-eus*, for a guttural in this position easily slips into a sibilant. The adj. *δημοσιος* has been quoted by Sanskritists as confirming their theory, inasmuch as it is directly deduced, they say, from a theoretic gen. *δημο-σιο*; but here again I would divide the word as *δημοσ-ιος* = *δημοχ-ιος*, or something like it, unless indeed, what seems more probable, *δημοσιος* for *δημοσιος* comes directly from *δημοτης*, just as *ικεσιος* from *ικετης*, *Μιλησιος* from *Μιλητος*. But if I thus knock off the initial sibilant from the alleged suffix *syā*, I am ready to make compensation by adding a final *s*, so that the suffix may be *yas*, which would accord with the L. forms *quo-iūs*, *hu-iūs*, *un-iūs*, for *uno-iūs*. Nay, *un-iūs* itself I would deduce from a primitive theme *un*, of which *un-o-* is a diminutive. In Greek, as in Sanskrit, the final *s* is dropped, *το-ιο λογο-ιο* having in my view superseded older forms, *το-ιος λογο-ιος*. I have said the

suffix was *yas* or *ιος* (*ius*). Possibly I ought to go a step further back and claim a form *yans* or *ιωνς*; for otherwise I find a difficulty in the forms like the S. *prityás* 'amoris,' Gr. *πολεως βασιλεως*, and Go. *ƿinjos* (Grimm, D. G. I. p. 603). But be this as it may, from *yas* or *ιος* we can readily deduce such slightly corrupted genitives as *ποσι-ος*, *γενν-ος*, *φεροντ-ος*, *οπ-ος*, L. *senatu-ος*, *Vener-us*, *uoc-is*, *ferent-is*; S. *náv-as*, *vách-as*, *námn-as*; Go. *fisk-is*, O. G. *visc-es*, A.-S. *fisc-es*. And then again with the loss of the vowel, G. *σοφια-ς*, etc., S. *súnó-s*, *gó-s*, L. *familia-s*, E. *man-s*, *woman-s*, *John-s*. In the S. genitives *blhrátur*, *duhitur*, *dátur*, corresponding to *fratr-is*, *θυγατρ-ος*, *δοτηρ-ος*, we have only another instance of the power of an *r* to destroy a following *s*. But an *s* is also lost for many of the Latin genitives. Thus in place of the theoretic *familia-is* we find not merely *familia-s*, as just stated, but also an archaic *familiai*, which easily glided into *familiae*. So in the *e* declension the co-existing forms *diei* and *dies* point to *dieis* as their common origin; just as the genitives *mei* and *mis* serve to establish an earlier *meis*. In the *o* declension, besides the ordinary gen. in *i*, we have, as already noticed, the fuller *ius*, for the most limited to pronominal roots, and by that very limitation shown to be older. Again in the so-called third declension, by the side of an ordinary gen. *Socratis*, *Periclis*, we find a well authenticated *Socrati* and *Pericli*.

But there is yet another form of the suffix too often neglected. I have already (p. 41) made reference on this point to Mr. J. M. Kemble's paper in the Phil. Society's Proceedings; but I venture to produce yet additional evidence from this source, as in the use of the suffix *ing* in the formation of patronymics as (Saxon Chronicle, anno 855) *Friðogár Brond-ing*, *Brond Bældæg-ing*, *Bældæg Wóden-ing*; that is, 'Friðogar the son of Brond, Brond the son of Bældæg, Bældæg the son of Wóden.' He goes on to point out that in names of places *en* replaces the genitive singular of a person. Thus *Surrenden* in Kent, he says, once called *Swiðræding-den*, is 'the pasture belonging to Swiðræd,' and so is equivalent to *Swiðrædes den*. He then gives a list of 316 names of places so formed; and, not satisfied with this, he shows historically in some cases that the names so arose. Thus a house in London called *Ceólmunding-haga* had a charter attached to it, in which it

is stated that Ceólmund sold the same to the Bishop of Worcester. Again a farm belonging to a Bishop Oswald appears in a list in the motley garb of *Oswalding villam*. The only fault I would find with this paper is that the writer draws too fine a distinction between a genitive and a patronymic, for surely patronymics and genitives are one. He himself quotes the phrase *Ἀδὰμ τοῦ θεοῦ*, and we are familiar with the combination *Δημοσθεῖς Δημοσθένους*.

Allied to the preceding is *en*, *an*, or *in* of Gaelic. Thus from *bo* 'cow,' *cu* 'dog,' *brù* 'belly,' come the gen. *bo-in*, *co-in*, *bronn*. It is true that these are exceptional, and indeed seem to stand by themselves, but they evidently are remnants of an old formation. In general the final nasal is dropped, as *lagh* 'law,' *g. lagh-a*, *roth* 'wheel,' *g. rotha*; probably for *lagh-an*, *roth-an*. In many it would seem that a suffix *in* first led to a modification of the vowel of the stem, and having left its mark upon the word, fell off, wholly or in part, as no longer wanted, as *cos* or *cas* 'foot,' *g. coise*; *clach* or *clach* 'stone,' *g. cloiche*; *gob* 'bill of a bird,' *g. guib*; *carn* 'heap of stones,' *g. cùirn*; *mac* 'a son,' *g. mic*. (Highland Society's Gr. p. 7.) Again in the Teutonic family I find the same form of our suffix playing a regular part in the so-called 'Alemannisch' dialect, where the genitives *fatercs fatercn*, *Karles Karlen*, *Heinriches Heinrichen*, etc., are alike in use (Weinhold's Gr. §§ 409, 411). The possessive pronouns in ordinary German, *me-in*, *de-in*, *se-in*, seem due to a similar formation. But over and above this, the genitival suffix *en* is freely used in what is called the composition of nouns, as *Sonn-en-schein*, *Mond-en-licht*, *Has-en-lage*, *Mensch-en-alter*, forms which are parallel to the Latin *agri-cultura*, and to the Gr. *Πελοπον-νησος* for *Πελοπος νησος*, the letter *σ* having been assimilated to the following liquid; unless indeed we have here another example of a genitive ending in *v*. English also has words built up on the same principle, as *earth-en-ware*; and indeed our so-called adjectives, *linen*, *silken*, *golden*, are in origin only genitives, just as are also in origin the Latin *aur-eus*, *cinc-r-cus*, *herbac-cus*, etc., *uinac-eus* or *uinac-ius*, for both forms have good authority. Again *v* of Gr. adjectives, as *ξύλ-v-os*, *κρυσταλλ-v-os*, is in all probability one with the *en* we are speaking of; and so too the *n* of *Roma-n-us*, *divinus* for *diuo-*

in-us, *Pomo-n-a*, *hiber-n-us*; and the *in* of *crast-in-us*, *prist-in-us*, from *cras* and *prius*, with an excrecent *t*. But a suffix *εν* with the notion 'from' is familiar in the Gr. *ποθεν*, *ενθεν*, *εμεθεν*, *ουρανοθεν*, *οπισθεν*, where it is commonly held that the *θ* belongs to the suffix, but this is open to dispute. At any rate in A.-S. *hvon-an*, *heon-an*, *ƿon-an*; in G. von *wann-en*, von *hin-en*, von *dann-en*; and in old E. *whenn-es* *kenn-es* *thenn-es*, now *whence* *hence* *thence*, we have no trace of any *th*.

Take again from our geographical nomenclature forms like *Frier-n Barnet*, corresponding to 'Abbot's Langley,' 'King's Langley.' So in Germany we have now a considerable number of surnames, which in themselves are patronymic genitives, as *Matthiae*, *Ernesti*, *Pauli*, *Jacobi*, *Henrici*. Again in Wales, where it is a still living habit to give each man for a surname his special patronymic, we have descending genealogies such as 'John Price, William Jones, Harry Williams, Richard Harris, Thomas Richards, etc.' But the same use of a genitive accounts for the Gentile names in Rome, *Sextius*, *Quinctius*, *Decimius*, *Tullius*, *Marcus*, etc., which, at first mere genitives, were then like the gen. *cuius* forced into declension, so as to give us the combinations 'Octavia Porticus, Sulpicia horrea, Cornelia castra, Tullia lex.'

But an *n* also exhibits itself in the gen. plural, as S. *αἰνᾶ-n-ām*, *τρί-n-ām*, *σύνᾶ-n-ām*, etc.; in the Z. *ἀσπα-n-añm*, *ἀφρίτι-n-añm*. But it is of not unfrequent occurrence in the Teutonic family, as from O. G. *kēp-a* 'gift,' g. pl. *kēpōn-ō*; A.-S. *gifu*, g. pl. *gifen-a*; O. Fris. *hono* 'gallus,' g. pl. *honen-a*; and O. N. *tungana hiartna*; and this *n* Bopp strangely regards as epenthetic and devoid of meaning.

Such being the case within the admitted limits of the Indo-European family, I venture to bring as an additional argument for the affinity with this of the Finn and Lapp languages the facts, that in Finn *cala* 'piscis,' *wieras* 'hospes,' *tullut* 'adueniens,' *jānes* 'lepus,' have for gen. respectively *calan*, *wierahan*, *tullehen*, *jānex-en*. These from Vhael's Gr.; while from Rask I take *toli* 'a stool,' G. *tolen*. In the same language the personal pronouns *mīna*, *tämä*, *hän*, have for sing. gen. *minan*, *taman*, *han-en*. Then for Lapp *gä* (*gi*, Rask) 'quis,' has for gen. *gän* 'cuius;' *mī*

'quid,' *man* 'cuius;' *gä-k* 'quisque,' *gän-k* 'cuiusque.' (Ficllström's Gr.)

But there remains yet another letter which claims admission into the genitival suffix, *k*, as seen in the S. genitives *asmá-k-ám* 'of us,' *yushmá-k-am* 'of you;' and in my treatment of the perfect tense I was in like manner led to assign the same origin to the *κ* of such verbs as *πεφίληκα* *εσταλκα*. Again we find a guttural in the Slavic *tě-chŭ* 'horum' (Bopp, end of § 278), and in the m. gen. *to-go* 'huius' (§ 269 and § 349), *yego* 'eius' (§ 282). When we compare this *to-go* with the Gr. *τοιο*, we see precisely the letter change so well known in our own language, as *yate* = *gate*, *yesterday* compared with the Germ. *gestern*, *yeast* with *geist*; and this view is strengthened by the form of the f. gen. in Slavic, viz. *to-^yan* 'huius,' *ye-yan* 'eius.' Hence too, if Sanskritists be right in the division *urka-sya*, so as to hand over the *s* to the suffix, I should still hold that the *sy* of this form, pronounced perhaps as *sh* in English, is a disguised guttural, as it seems to be again in the Vedic pronoun *syā* (aft. *sa*) 'this,' for this demonstrative pronoun seems to have had at the outset an initial *k*, as still in L. *cis*, *citra*, etc., and *ceteri* for *koi eteroi* = *οἱ ἄλλοι*.

If then we keep in view the several forms which belong to our suffix *yas* or *ios* on the one hand and *en* or *yan* on the other, and recollect also, how readily a final *n* interchanges with a final *s*, and lastly that the *y* sound of *yas* and *ios* often grows out of a guttural, we are led to the conclusion that an original *gan* or *gen* will explain all the varieties, including the form *yans* with an excrescent *s*, of which mention was made above. Thus we arrive at a form *gen*, the root of *gi-g(e)n-o*, *gen-us*, from which the very name 'genitive' is deduced. This theory however is one on which I place no great reliance.

The suffix of the dative or locative has for its more familiar form a mere *i*, as in L. *quo-i*, *reg-i*, *gradu-i*, *re-i*, Gr. *νυκτι*, *τειχε-ι*, *ιχθυ-ι*, but often degraded to a subscript letter, as *ἡμερα*, *λυκω*, which seems to imply that it was not pronounced, so that we have what is parallel to the L. *lupo*, *gradu*, *re*, as datives. But we soon find an earlier form was *bi*, as seen in the pronominal adverbs *i-bi*, *u-bi*, *ali-bi*, *utro-bi*, *utro-bi-que*, etc., which by their

very meaning tell us that they are locatives of the several pronouns, *is*, *qui*, *alis*, *uter*, *uterque*. I purposely abstain from quoting *sibi* and *tibi* as equally decisive, because in these words the theme has itself a good title to the *b*. So in Greek we find a ϕ , which is the usual analogue of a L. *b*, as in *οὐρανο-φι*, *βιη-φι*, *ι-φι*, *στηθεσ-φι*. It is often contended that the Homeric forms in ϕ ($\phi\nu$) are as much genitives as datives, but the examples quoted in support of this view are often not available. In Il. ϕ , v. 295, Prof. Malden (Ph. Soc. Tr. 1855, p. 153) has given valid reasons for reading *πριν κατα Φιλιοο κλυτα τειχεα λαον εφελσαι* in place of *π. κ. Ιλιοφι* . . .; and the use of such forms in Homer after prepositions, *απο*, *εκ*, etc., which usually have a genitive, as in *απο πασσαλοφι*, Il. ω , v. 268, *εκ πασσαλοφι*, Od. θ . 67, is consistent, as I have already remarked, with the translation 'from on the peg,' the noun being still a dative. The plural forms are still stronger witnesses in favour of the *b*, as *mulabus*, *duobus*, *nucibus*, *ciuibus*, *pecubus*, *rebus*, *regibus*; and the S. *açvê-bhy-as* 'equis,' *âçvâ-bhy-as* 'equabus,' Zend. *âçpaii-byô* 'equis.' We have yet another letter in the Homeric *οὐρανο-φιν*, etc.; and this nasal is implied in the long *i* of *nobis*, *uobis*; and I cannot but believe that we have it again with a slight variety as regards the labial in the S. *kas-min* 'wem,' and *tas-min* 'dem,' for I have already said that I claim the *s* of these words as part of the theme. Again in Umbrian 'the locative of all declensions is for the singular *mem*' (A. K. Umbr. Sprach. D. § 33, 8), but often cut down to *me*, as their examples show. The Lith. too has for the plural suffix *mus*, as *põna-mus*, *ashvõ-mus* 'equabus,' *sõnu-mus*; and the cognate language called O. Prussian gives us the still more complete form for the plural, as *gennâ-mans* 'mulieribus,' *wyr-i-mans* 'uiris,' *wirdemmans* 'nerbis,' *Cristiânimans* 'Christianis,' *nou-mans* 'nobis,' *iou-mans* 'uobis.' Bopp too identifies the Greek $\phi\nu$ ϕ and the Lat. *bi* with the Umbrian *fe*, as in *i-fe* = Lat. *ibi*. I have already pointed to the S. dual of the instr. d. and abl. in *açva-bhyam*, the ved. d. pl. *açve-bhis*, as also to the dat. and abl. pl. *açvê-bhyas*, as containing *bhy* or *bhi*, so like the *bi* of the Latin suffix.

In the Gothic *hvam-ma* I claim, as stated below, the first *m* for

the stem, and so have only *ma* left for the case-ending. Similarly in the O. Prus. pronominal datives for the sing. I contend for the division *stes-mu*, *schis-mu*, *kas-mu*. But the vowel is lost in Lith. *kam*, as also in the G. *dem*, etc.; and it seems not unlikely that we have a dative rather than an accusative in the Lat. *inter-im* for *inter-ibi*, and very possibly also in *postquam* (cf. *nach-dem*), *antequam*, etc., nay even in *postea*, *antea*; and this in spite of *aduorsum ead*, a satisfactory explanation of which seems yet to be found.

The derivation of *quoi regi*, etc., from theoretic forms in *bi*, involves the assumption that a *b* between vowels in Latin is subject to absorption; but this is a question which has already been discussed (p. 189); and to what is there said, I would add that *tibi* and *sibi* appear in French, not merely as *toi*, *soi*, but in still shorter form, *te*, *se*, as *tu te laves les mains*, etc. I venture then to claim as occasionally datives in Latin the same *te* and *se*. Thus Virgil has, *nec te tua funera mater Produxi, pressius oculos aut uulnera laui*; for in such phrases the Latin idiom demands a dative, and does not tolerate a possessive. Then *tua* as a nom. adds strength to *mater*; and its union in position with *te* improves the emphasis. Other examples of *te* as a dat. are seen in: *quis te persuasit* of Ennius (ap. Serv. Aen. 10, 10); *nescis quid te instet boni*, Pl. Pers. 4, 3, 45 (so A. B.); *te indulgebant*, Ter. Haut. 5, 2, 34.* This theory finds confirmation in that a dat. *té* is known alike to Sanskrit and to Zend; while a dat. *sé* in Prakrit is represented by *hé* and *hói* in Zend.

The ablative in its oldest form exhibits a final dental, *d* or *t*, as in archaic Latin, *Gnainod* = *Cnaco*, CIL. 30; *altod marid*, 195; *praidad*, ib. 63 and 64; Osc. *preivatud* = L. *privato*, *toutad* 'populo'; *dolud mallud* = *dolo malo*; S. *aṣrât* 'equo'; Z. *aṣpâd*. But these are all from vowel-nouns, so that the vowel of the suffix may have been absorbed; but we find such a vowel in L. *coventioned*, CIL. 196, *dictatored*, 195; Z. *viṣ-ad* 'loco,' *ṣauchant-ad*

* But this *te* looked so much like an acc., that eventually verbs which should have had a dat. accepted an acc., as "quae res me impendet," Lucil.; add Ter. Phorm. 1, 4, 2; but in Pl. Poen. 4, 2, 96, I would read: tantum ei instat exiti." See however Neue, Formenlehre, 2, p. 128.

‘splendente,’ *ap-ad* ‘aqua.’ In the pronominal forms, L. *med*, S. *mat*, Z. *mad*, L. *ted*, S. *tvat*, Z. *thvad*, whether the vowel belong to stem or suffix or both, may be left open. Yet again an initial consonant seems to belong to the suffix in the S. pronouns *tas-mât* ‘hōc,’ *étas-mât*, *kas-mât* ‘quo.’ But here I am running counter to the doctrines of Bopp, who would divide these words as *ta-smâ-t*, giving *t* alone to the suffix, and regarding *sma* as a third person pronoun, inserted between stem and suffix, but with what power or for what purpose it is difficult to say. But this same *sma* is again and again summoned to his aid, as for example in his explanation of the Vedic nom. pl. *asmê* = ἡμεῖς, *yushmê* = ὑμεῖς; and it seems to serve his purposes the better, as its form is assumed to vary almost without limit. Thus he himself tells us (§ 167) that in Gothic alone it takes six different shapes, viz. *nsa*, *ḡva*, *nka*, *ngva*, *mma*, and *s*.

But this habit of finding the insertion of pronouns characterizes all his dealings with declension. Thus in § 115 he says generally, “The case-endings in their origin are, at least for the most part, pronouns, and whence,” he adds, “could such exponents of the relations of place united to a word-stem so as to form a new growth be more suitably deduced than from those words which express personality with the accessory notion of space that is inherent in them, the nearer or more remote . . . ?” Accordingly (§ 134) he finds the *s* of the nom. in the S. pronominal stem *sa*, ‘er, dieser, jener.’ Then in § 157, we read, “*m* of the accusative is, I doubt not, of pronominal origin;” and this is followed by a reference to S. pronouns *i-ma* ‘dieser,’ and *a-mu* ‘jener,’ as if the *m* were due to these words. In § 158, “the instrumental is in Sanskrit denoted by *â*, and this flexion is I believe a lengthening of the pronominal stem *a*.” In § 164, “in Sanskrit *e* (in fem. *âi*) is the characteristic of the dative, which in origin probably belongs to the demonstrative stem *ê* (nom. *ay-an* ‘dieser’); and this again is itself, as it seems, only an extension of the stem *a*.” In § 179: “The ablative has in Sanskrit *t* for its characteristic; and about the origin of this *t* no one who has once recognized the influence of the pronouns on case-ending can remain in doubt, as he is instantly conducted to the demonstra-

tive *ta*, which already in the neuter nom. and acc. has assumed the office of a case-symbol." In § 194: "As regards the origin of the form [of the suffix in the gen., viz. *syā*], the language goes back once more to the same pronoun, from which the nom. was explained." At the close of § 201: "As concerns the origin of the *i* [in the dat. suffix], which points to place or time in continuance, it is easy to find this, so soon as *i* is recognized as the root of a demonstrative, which however has escaped the notice of the Indian grammarians, as also the true form of all the other pronominal roots." Thus it will be seen that Bopp never vouchsafes to give any logical explanation of the fitness of these several pronouns for the office they have each to fulfil; and indeed leaves us to the conclusion that any third-person pronoun whatever might be employed as the symbol of any case whatever; while as to form he is contented to deal with most of the case-endings in their most degraded state.

In the examination of the plural suffixes, there will be nothing extravagant, if we take a first hint from our own language, provided always that this hint find confirmation in the more esteemed languages. Now our own suffixes of plurality are *es* or *s* (=z), as in *churches*, *coits*, or the thin *s*, as heard in *dice*, *mice*, *pence*; and secondly *en*, as in *oxen*, *kine*; and in Scotland, in place of *es* is found a suffix *er*, as in *childer*, so that according to some the old forms *ay-r-en* 'eggs,' and *calv-er-en* 'calves,' of Maundeville, and *lamberen* of Halléwell's dictionary, contain 'gehäufte Mehrheitsformen' (Fiedler's Gr. p. 223). So in German we find both *en*, as s. *Frau*, pl. *Frauen*, and *er*, as s. *Mann*, pl. *Männer*, not to mention those which have dropped the final consonant, as *Sohn Söhne*, *Nacht Nächte*; and even the vowel, as *Apfel Äpfel*, *Garten Gärten*, *Vater Väter*, therein agreeing with our *men*, *mice*.

Then turning to the older languages, we find good evidence of the same use of the sibilant as a symbol of plurality in the Cretan dialect, as *τοvs = τοvs* in Boeckh's Inscr. 3050, l. 14; *πρεπευταvs = πρεπευτας*, 3058, l. 4 (cf. Ahrens de dial. 2, 105; add 226 and 227). So again in Gothic the pl. acc. has preserved the genuine form with great accuracy; as for masculine nouns in the *a*-decl. *firk-ans*, in the *i*-decl. *baly-ins*,

in the *u*-decl. *sun-uns*; and for feminines, in the *i*-decl. *aust-ins*, in the *u*-decl. *hand-uns*; whereas in the *a*-decl. the *n* has been absorbed, as in *gib-ós*, in place of *gibans*; and this prepares us for the same absorption and compensation by length of vowel in the Latin *patrēs, musās, scruōs, auīs, gradūs, diēs*; and indeed the preservation of an *n* before an *s* is scarcely ever to be expected. Thus (I am quoting from Ahrens' note, 2, 104), "Apoll. de synt. 313, 20, τὸ ὅ τοῦ ῑ οὐ προηγείται." Hence *οδους* as a nom. takes the place of *οδovs*, *λεγουσι* of *λεγονσι*.* In accordance with this, in the Greek plurals of the vowel declensions we find *μουσᾶς, λογους, πολεις, ιχθῦς*. If *πατερ-as, va-as, γειν-as, βο-as, ποσι-as*, have a short *a*, in violation of what we had a right to expect, this is in agreement with the love of this language for shortened forms. On the other hand the Lithuanian, though it has lost the nasal, treats the vowel as long, at least in the vowel nouns, as *ponù-s, tà-s, avì-s, sunù-s*. The Sanskrit finally retains now the *s*, now the *n*; and again in vowel-nouns lengthens the vowels, as masc. ac. pl. *açvâ-n, patî-n, sunû-n*; but fem. *açvâ-s, prîtî-s, hanû-s*; yet again, like the Greek, it has m. *asman-ās*, f. *nav-ās*.

The addition of an *s* to the datival suffix of the singular in order to constitute a plural has already been noticed. We see it already in *μουσαις* and *λογοις*, and virtually in the L. *equis*, f. for *equabus*, m. for *equobus*. So to the Oscan dat. s. *ui* of the *u*-declension corresponds a pl. d. *uis* (Mommsen's Osk. Stud. p. 39). Again when we turn to the fuller datival forms with an initial labial, we find our *s* in the Latin *mulabus ambabus, ambobus duobus*, as also in *nobis vobis*, implying older forms, *nobins uobins*; so too in the S. instr. *açvâ-bhîs*, and the S. dat. and abl. *açvâ-bhyás*; and in the Zend *hiçvâ-byo*, which with the enclitic *cha* (= L. *que*) takes the more genuine shape *hiçvâ-byas-cha*.

In the nom. pl. we may regard the L. *patr-ēs* as the most instructive of all the allied languages, in that it has a long vowel, and this independently of the theme; whereas we find only short vowels in *πατερες* and S. *bhrâtar-ās* and merely an *s* in Lith. *dukter-s* and Goth. *akman-s*, etc. But to break up this *ēs* so as

* Exceptions for the eye are *ἐλμυς τῖρυνς*, but perhaps even here the *ν* was probably silent.

to exhibit suffixes for both case-ending and plurality is not easy. To suppose that a letter *s* was used for both offices is against probability, and so I deem it more reasonable that *es* may represent a fuller *en-s*; the former being one with the genitival suffix already mentioned, which might have been available for the nominatives, as in the assumed theory the suffix *is* is, and the *s* again a symbol of plurality. The non-appearance of an *s* in the nom. of the *a* and *o* declensions, as *musae serui* *μονσαι λογοι*, is explained by the habit of both languages to drop a final *s*, as so often noticed, yet the old Latin language knew nominatives of the *o*-decl. in *eis* and *is*, as: "Censoribus queiquomque post hac *facteis* erunt," CIL. 200, 28; "*eis* . . . iouranto," 197, 16; and then in Plautus (Most. 2, 2, 78): "*illisce* hodie hanc conturbabant fabulam;" and Ter. (Eun. 2, 2, 38): "*Hisce* hoc munere arbitrantur Suam 'Thaidem esse." Again, the Old-Umbrian gives to pl. nom. of the *a*-decl. a ^{final} suffix *as*, e.g. *urtas* (= L. *ortae*), and in the *o*-decl. a ^{final} suffix *us*, e.g. *prinuvasus*; but in the later Umbr. *ar* and *ur* (A. K. pp. 113 and 118); while the Oscan is thought by A. K. to have two nom. pl. of the *a*-decl. in tab. Bant. l. 25: "*pas* ex aiscen ligis *scriftas* set" = *quae* ex *hisce* *legibus scriptae* sunt.

I turn next to those forms where the old languages seem to have employed a nasal rather than a sibilant for the office in question; like our *ox-en*, *brethr-en*; and this I seem to find first in the Greek *μονσα-ων πατερ-ων*, which I am inclined to look upon as standing for *μονσα-οσ-ν πατερ-οσ-ν*, so that before the *ν* we have what was a sing. gen., while the L. *musā-r-ūm seruō-r-ūm die-r-ūm* also supplanted a former *musa-s-um*, *seruo-s-um*, *die-s-um*. Similarly we know that in the consonant-decl. there once existed a fuller form in *ěrum*, and this on abundant evidence, as Varro's for *bou-er-um*, and *Iou-er-um* (l. l. 8, 38, 74), *nu-ċer-um*, *reg-er-um*, *lapid-er-um*, Charisius (54, 25 K.); and these are evidently formed from the sing. gen. *bou-is* *Iou-is*, the *s*, as usual, when thrown between vowels, passing into an *r*, as already seen in *musarum seruorum*, and the *ĭ* before an *r* into *ě*. On the other hand in the gen. *auium*, *graduum*, the *s* of the gen. has vanished, after the Greek fashion of substituting *γεν-εος* for *γεν-εσ-ος*, *μαχουμαι*,

for *μαχέσσομαι*; and a similar loss has led to the contracted genitives *amphorum*, *modium*, etc.

The Greek datives plural *παῖδ-εσσιν*, *ν-εσιν*, *μον^υσα-ισιν*, *λογο-ισιν*, *δαιμό-σιν*, *σωμα-σιν* offer much difficulty; but we may safely infer that their formation is the same as that of the Sanskrit locatives, *açré-shu* 'equis,' *açvá-shu* 'equabus,' and *náu-shu* = *vanσιν*, and the Lith. *põnũ-se* 'dominis,' *awi-se* = *ovibus*, *sũnũ-se* 'filiis.' All would be simple enough if we could think that the symbol of plurality for once preceded the symbol of the case-ending; but this is unlikely, because it would therein differ from all the other formations. I would rather believe that here, as so often, we have an interchange of the dental nasal, and the sibilant, an interchange that has already been seen in *βασιλιννα βασιλισσα*, and again appears in the suffix of the G. *Herzog-inn* and our *Duch-ess*, to take one of many examples, as also in the Gr. verbs of continuance, now ending in *ασσ-ω*, now in *αν-νμι*. But this also may be thought an overbold suggestion. Still that *ν* may be a symbol of plurality, like our own *-en*, will readily be admitted; and if so, that of the case-ending must be in the syllable *εσσ* of *παῖδεσσιν*, etc.

The final *a* of neuter plurals has been reserved as exhibiting neither sibilant nor nasal. Here, as in the singular, we find a community of form for the two cases nominative and accusative; and the same plea may be put forward in defence of the fact. As to form it may first be observed that the suffix of neuters is a mere *a* alike in Greek and Latin, the language of the Vedas, Zend, and Gothic, as Gr. *δοπα*, L. *donã*, *carminã*, *retiã*, *genuã*; S. Ved. *dãnã*, Z. *dãta*, Go. *daura*, *vaurda*. Then as to the origin of this form, I think there is every reason for concluding that it arose from a corruption of a nasal suffix *en* or *an* corresponding to that of our own *oxen*, when I call to mind the changes in *εἶνεκεν εἵνεκα*, *κεν κε* Dor. *κᾶ*, *ἑπτα εἰνεα δεκα* by the side of L. *septem nouem decem*, S. *saptan navan daçan*, *τεν* of *τεινω* with *ετα-θην τεταμαι*, *φαν* of *φαινω* with *φαος*, *φονος* from a root *φεν* with *Απειφatos*; and again *pa* of *pa-astor* * with *pen* of *pen-u*. It will have been observed that to the Vedic *danã* I have given a long

* So (*paastor*) in Mommsen's Corpus Inscr.

final, and again a varying final to the *L. donā*. The first is on the authority of Sanskritists. Thus Bopp so marks it in *V. G.* § 234, p. 463, assigning a thoroughly valid explanation of the fact in that neuters of this declension blend the theme-vowel with that of the suffix. In *carmin-a*, *reti-a*, *genu-a* the *a* belongs exclusively to the case-ending; but the *S. dānā* is for *dāna-ā*. His example is *viśvā* as contracted from *viśva-a*. In the same place he explains the somewhat anomalous forms in Gothic *thō* 'haec' and *hvō* 'quae,' as formed by contraction from *thaa*, *hvaa*, this language employing a long *o* in place of a long *a*, for the simple reason that a long *a* was unknown to it. He seems not to have noticed that the diphthong in the Latin pronominal forms *haec quae* may be due to the same cause. At any rate the old Latin language bears indisputable traces of agreement with the old Sanskrit in claiming a long *a* for the neuter of the second declension. This I pointed out in a paper on *ferumen* attached after the German fashion to the Prospectus or *Index Lectionum* of University College for the session 1872-3, quoting two passages from Terence (*Eun.* 2, 2, 32, and *Hec.* 4. 2, 28):

"Si pótis est, tamquam philosophorum habent disciplinae ex
ípsis

Vocábulā,* parasíti ita ut gnathónieci uocéntur;"—and

"Si cétera sunt út uis itaque utí 'sse ego illa exístumo."

Then Plautus (*Pseud.* 5, 1, 14) has:

"Vbi amáns complexus ést amantem, vbi ád labrā labélla;"

and in the *Glor.* 4, 8, 25, I read

"Nón placet; labrá labellis † fěřmīnat. ~ ⊥ ~ —.

* If it be opposed to this view that *la para* as a tribrach supplies the place of a trochee, my answer is that such a solution of a trochee is as utterly unknown to the Latin as to the Greek drama, always excepting those cases in which two words though written apart are pronounced together, as *αντικα-μαλα* in Aristophanes, which I read as *αντικάμ'λα*. *Διεσπασαντο σκυλακες ás εθρεψατο*, says Prof. Malden to me, is an unobjectionable line, but not: *διεσπαραξαντο κυνες ás εθρεψατο*.

† The MSS. have *ab lauellis*, the *ab* (intended as a mere correction of the false spelling *lauellis*) having passed into the text as a preposition, so as to destroy alike sense and metre. For the quantity and form of *ferumīnat* see my paper on the subject.

CHAPTER XIX.

ADJECTIVES.

ONE of the first questions that occurs to an enquirer in this direction is the origin of the anomaly by which adjectives in many languages are subjected to change in respect of number gender and case in defiance of all logical fitness. The idea of a masculine 'long,' a plural 'long,' 'to or from long,' is simply an absurdity; and thus we must award a superiority in point of reason to those languages in which adjectives are without inflection, as, first, the Tatar family. Thus, in Mongolian we find (Schmidt's Gr. p. 38) that "no adjective as such, that is as a qualifying word in connection with a substantive, can be declined." And soon after: "Only then are adjectives declinable, when they appear independently as substantives, in which case they for the most part admit a plural." So also we learn from David's Turkish Grammar (p. 16): "Les adjectifs turques ne changent pas de terminaison pour le genre, le nombre ou le cas." In Hungarian, says Wékey (p. 83): "Adjectives when followed by nouns are the same for both singular and plural . . .; but when they are used as predicates, they take the plural suffix."

But it is not merely within the limits of the Tatar family that this abstinence from inflection is seen. Already in the Ossetic language of the Caucasus, *i. e.* one of the Indo-European family, we learn from Siogren (Sprachlehre, § 39, p. 65): "Adjectives in all their degrees are inflected according to number and case, precisely as substantives; but only when they supply the place of the latter; for when attached to them, they are used without any change, the substantive alone being then declined."

See too Rosen's Gr. p. 6. In Breton the exclusion of all suffixes is more absolute (Legonidec, p. 55); and even in Welsh "many primitive adjectives have no plural," and "adjectives which have a plural form are often used in the singular with plural nouns" (Spurrell's Gr. p. 17).

But our own language can scarcely be included, in as much as it owes its non-inflection of adjectives to corruption through the gradual loss of suffixes once employed for inflection, and indeed inherited from the Anglo-Saxon.

It is probably then a safe assumption that the declension of adjectives grew out of their use as substantives, as *ein Gelehrter*, 'a learned man,' *eine Gelehrte*, 'a learned woman;' and possibly the habit began in the use of the demonstrative pronouns with the power of substantives, as *is ea id* of Latin, *er sie es* of German.

The so-called definite declension of adjectives in the Teutonic and Slavic branches has clearly resulted from a combination of an adjective with a demonstrative pronoun, as shown by Bopp in §§ 282, 283, 284, where he exhibits in detail the declension of the Lith. pronoun *jis*, Old Slavic *i*, and the definite declension of the adjective in both languages, viz., Lith. *gera-s*, 'good,' and O. Slav. *dobro*, 'good.' In quoting what he says I have thought it better to take the orthography and arrangement of Schleicher as regards the Lithuanian; and have adapted to the same what Bopp gives for the Slavic.

LITHUANIAN.

Masc. Sing.

N.	jis	geràsis
A.	jì	gérājì
L.	jamè	gerámjame
D.	jám	gerámjām
I.	jũmì, jũ ..	gerũju
G.	jó	gérojo

Plur.

N.	jé	geréji
A.	jĩs	gerĩsius
L.	jũsè	gerũsiũse

Fem. Sing.

jì	geróji
jé	gérājé
jojè	gerójoje
jéi	gérājéi
jè, jé	geráje
jós	gérosès, gerósios

Plur.

jós	gérosès, gerósios
jès, jés	gerásés
josè	gerósiose

<i>Plur.</i>				<i>Plur.</i>			
<i>D.</i>	jéms	.. ..	gerémséms	jóms	.. ..	gerómsioms	
<i>I.</i>	jéis	.. ..	geraíseis	jomis	.. ..	gerómsiomis	
<i>G.</i>	jú	.. ..	gerúju	jú	.. ..	gerúju	
<i>Dual</i>							
<i>N. A.</i>	júdu	.. ..	gerúju	jédvi	.. ..	geréji	
<i>D. I.</i>	jémdvém	..	gerémsēm	jómdvēm	..	gerómsiom	
<i>G. L.</i>	júdvējū	..	gerúju	júdvējū	..	gerúju	

OLD SLAVIC.

<i>Sing. m.</i>	<i>indef.</i>	<i>def.</i>	<i>Sing. f.</i>	<i>indef.</i>	<i>def.</i>
<i>N.</i> i ..	dobrū	dobrūj	ja	dobra	dobraja
<i>Ac.</i> i ..	dobrū	dobrūj	juñ	dobruñ	dobruñjuñ
<i>I.</i> imī	dobromī	dobrūimī	jejuñ ..	dobrojuñ	dobrojuñ
<i>D.</i> jemu	dobru	dobruumu	jej	dobrê	dobrêj
<i>G.</i> jegu	dobra	dobraago	jejañ ..	dobrū	dobrūjañ
<i>L.</i> jemī	dobrê	dobrêêmī	jej	dobrê	dobrêj
<i>Dual</i>			<i>Dual</i>		
<i>N. A.</i> ja ..	dobra	dobraja	i	dobrê	dobrêi
<i>I. D.</i> ima	dobroma	dobrūima	ima	dobrama	dobrūima
<i>G. L.</i> jeju	dobru	dobruju	jeju	dobru	dobruju
<i>Plur.</i>			<i>Plur.</i>		
<i>N.</i> i ..	dobri	dobrii	jañ	dobrū	dobrūjañ
<i>A.</i> jañ	dobrū	dobrūjañ	jañ	dobrū	dobrūjañ
<i>I.</i> imi	dobrū	dobrūimi	imi	dobrami	dobrūimi
<i>D.</i> imū	dobromū	dobruimū	imū ..	dobramū	dobrūimū
<i>G.</i> ichū	dobrū	dobruichū	ichū ..	dobrū	dobrūichū
<i>L.</i> ichū	dobrêchū	dobrūichū	ichū ..	dobrachū	dobrūichū

Neuter.

<i>N. A. Sing.</i>	je	..	dobro	dobroje	<i>Dual.</i>	ja	..	dobrê	dobrêi
<i>Pl.</i>	ja	..	dobra	dobraja.					

The rest like the masculine.

The most casual inspection of these tables shows what the formation has been. But it may seem strange that the definite article should be appended instead of being prefixed; this how-

ever is a difficulty which vanishes, when we find that the Scandinavian habitually so attaches its definite article *hin* (m. *hinu*, f. *hin*, n. *hitt* or rather *hit*), only dropping the *h*, and at times the *i*. Thus the declension of *svein* 'a swain' runs:—

<i>Simple ; w. def. article.</i>		<i>Simple ; w. def. article.</i>	
<i>Sing. N.</i>	<i>sveinn .. sveinninn</i>	<i>Pl.</i>	<i>sveinar .. sveinarnir</i>
„ <i>A.</i>	<i>sveinn .. sveinninn</i>	„	<i>sveina .. sveinana</i>
„ <i>D.</i>	<i>sveini .. sveinum</i>	„	<i>sveinum .. sveinumum</i>
„ <i>G.</i>	<i>sveins .. sveinsins</i>	„	<i>sveina .. sveinanna</i>

In the modern Slavic dialects the system of a twofold declension of the adjective (as exhibited above) has been subjected to great disturbance alike in form and meaning; and indeed in Russian to such an extent, that the attached pronoun is now distinctly preserved only in the nom. and acc. sing. of the three genders; and at the same time, the sense of the appended pronoun is wholly lost, *dobrŭ-j*, *dobra-ja*, *dobro-e*, representing merely the Latin *bonus*, *bona*, *bonum*. On the other hand the simple adjective has been almost wholly superseded by the compounded form, except that it is used in the predicate and in poetic style. This from Bopp § 285.

From these facts Bopp is disposed to draw the inference, that the so-called strong declension of adjectives in German owes its form to the same source, although the idea of the definite pronoun is no longer felt in it, and the pronoun *der die das* must for this purpose be prefixed. This view seems to me to be confirmed by the form of the Gothic neuter in *ta*, as *vein niujata* and *vein juggata* for 'new wine' (Matt. ix. 17); for the loss of the definite idea is precisely what has happened to the Russian adjective, as just stated. On the other hand in the pronominal neuters *i-ta*, *tha-ta*, we have a reduplication of the pronoun just as in τὸν-το.

The formation of adjectives seems in a large proportion to take a genitival character. Thus *reg-ius*, *imperator-ius*, have a suffix precisely the same with *cuius* (*quo-ius*), from which were subsequently deduced the varieties *cuiā*, *cuium*, etc. So *meus tuus suus noster voster*, εμὸς ἡμέτερος, etc., like the G. *me-in de-in*, are

simply genitives at starting, as shewn by the phrase *gedenke mein* 'think of me.' So our so-called adjectives *carth-en*, *gold-en*, *braz-en*, are in origin only genitives, though now treated as adjectives. But as the Latin language gave to its adjectives with much indifference the ending *eus* or *ius*, *uinaceus* and *uinacius* for example, both of which have good authority, we must here include such forms as *ign-eus sax-eus ciner-eus*. Then again, as the nouns of the vowel declension originally had a final guttural, *rosac-eus membranac-eus sebac-eus murtac-eus*, *tribunic-ius rapic-ius* belong to our category. So too, as I have already said, the so-called gentile names in *ius* are to a considerable extent deduced from 'praenomina,' as *Quinctius*, *Sextius*, *Tullius*, *Morcius*, *Valerius* from *Quintus*, *Sextus*, *Tullus*, *Marcus*, *Volesus*; and thus they were probably at first merely patronymic genitives, like the Welsh surnames *Roberts*, *Richards*, *Davis*, *Thomas* (for *Thomas's*), from *Robert*, *Richard*, *David* (*Dary*), *Thomas*, thus agreeing with that other class of Welsh surnames, properly formed with a preposition *ap*, but frequently with this cut down to a mere *p* and so prefixed to the paternal praenomen, as *ap Robert* or *Probert*, *ap Richard* or *Pritchard*, *ap Howel* or *Powell*, *ap Hugh* or *Pugh*, *ap Rees* or *Preese* (*Price*). Add the German surnames *Jacobi*, etc. The old Latin language too admitted a shorter form of the case-ending, as *us* (Gr. *os*); and so *bellic-us*, *gallic-us*, may have been mere genitives. And here it may be well to observe that while *Gallus*, for example, meant a Gaul or native of Gallia, *Gallicus* can only be used of that which belongs to a Gaul, as *Gallicus ensis*. The adjectival forms *Roma-n-us* *diu-in-us* (*diuo-in-us*) *uiper-in-us* (*uipera-in-us*), *anser-in-us* as well as the Gr. *ξυλ-ιν-ος* etc. also fall in with the rest. Lastly we may keep in view our own forms of speech such as: 'a man of talent,' 'of worth,' 'of ability,' where the genitive fully supplies the place of an adjective.

Our English grammars not unreasonably give the name of adjectives to the first element in the compound terms, *leather apron*, *copper kettle*, *salt water*; yet in all probability these grew out of genitival forms, the first of them having superseded an older *leathern apron*, much as *Leaden-Hall* Market must once

have been called *Leathern-Hall* Market, as the place for the sale of leather, which in fact was the original business of ^{the} that part of the market. The loss of the genitival suffix has been already noticed in the form *bed-side*, called by Chaucer *beddys-side*; and *Oxford* may be added, as having formerly been called *Oxen-ford*, i. e. the 'Bosporus' (*Boos-πορος*).

Not unfrequently adjectives take a diminutival suffix; and then at times the simple adjective wholly vanishes, as in our own language *call-ow*, G. *kahl*; *sall-ow*, G. prov. *sal* 'dirty,' Fr. *sale*; *fallow*, *shallow*, *hollow*, *yellow*; and again *silly*, *holy*. In these instances the suffix was probably at first of a guttural character, and certainly so, as regards the last pair, as shown by the G. *selig*, *heilig*. A similar apocope of a final guttural may be assumed for the L. adjectives *leui-*, *breui-*, *dulci-*, *pingui-*, etc. on the evidence of *leuic-ulus*, *breuic-ulus*, etc.; and what is shown for these must be true also for the corresponding *ελαχv-*, *βραχv-*, *γλυκv-*, *παχv-*, in which the reduced suffix *v* approaches in sound to our own *ow*, as just given. In the L. *t(o)r-uc-* (n. *trux*) the guttural has been preserved owing to the shortness of the word; but has again been softened down in the secondary *toru-o-*. How readily a final guttural vanishes from a L. adjective is seen in *qua-li-* 'what-like,' *ta-li-* 'this-like,' compared with the G. *we-l(i)ch-er*, *so-l(i)ch-er*, our northern *quichilk*, *thilk*, now reduced to *which*, *such* (Sc. *sie*).

Similarly for nouns in *o*, the perfect participles of Latin, as *al-it-o-*, *mol-it-o-*, probably grew out of an older *alitoc-*, *molitoc-*, for in Welsh we habitually find corresponding forms in *ed-ig*, as *car-ed-ig* 'loved,' *dysg-ed-ig* 'learned.' Nay even in Latin a guttural is preserved in secondary forms, *subdit-ic-ius*, *tralat-ic-ius*, *importat-ic-ius*, etc., where again the genitival power of *ius* is seen; and words of this form accordingly denote the belonging to the class *subditi* or *subditi*, etc. Thus if we speak of the fact of importation, referring it may be to the date, the whence, the by whom, we use the participle, *uinum ab eo importatum*, and so on; but if the object be merely to speak of the wine as of foreign growth, and so opposed to home-made wine, the phrase would of course be *importaticium uinum*. Other genitival adjectives in

ius formed from nouns with a revived guttural bear similar evidence of the existence of a final guttural in the simple noun, as: *novic-ius*, *aedilic-ius*.

Yet another class of words may be quoted in support of the same doctrine. In Livy the first Harleian MS. has *lacticior* in 2, 1, 2; *tristicior* in 4, 52, 5 and 9, 6, 3; *iusticior* in 4, 53, 4; while *amicitor* is supported by the three Palatine and seven others in 2, 15, 6; *amicitor* and *inimicitor* by the same Palatine and three others in 27, 4, 6. Again *amicitor* has some MS. authority in Cicero (Fam. 3, 2 and 3, 3). Lastly in Sallust (Jug. 10, 5) the same has the support of not less than twelve MSS. Now it so happens that the four adjectives here spoken of have corresponding derivatives in *laetitia tristitia iustitia amicitia*, which compared with *insania* from *insanus*, *gratia* from *gratus*, leave the interposed syllable *it* unexplained, unless we may assume that this *it* grew out of an older *ic*; and a similar argument applies to *multitudo*, *altitudo*, etc., which I hold to have been corrupted from *multic-udo*, *altic-udo*, or rather *multoc-udo*, *altoc-udo*. As to this passage from *c* to *t* we had abundant examples in the formation of diminutival substances in the fifth chapter, as *L. abiet-*, *ariet-*, *E. gimlet*, *apricot*. But I return to the alleged form, *lacticior*, etc., to record the fact that respectable manuscripts give their sanction to a *c* in the derived substantives. Thus the MS. B of Plautus has *laetitia* in Ps. 2, 4, 15; 4, 5, 11; Merc. 5, 2, 5; *stulticia*, Pers. 5, 2, 20; St. 1, 2, 82; Merc. 1, 2, 94; Bac. 5, 1, 3; Most. 5, 2, 35; Trin. 3, 2, 82; *avaricia*, Ps. 3, 2, 13; Pers. 4, 4, 7; Glor. 4, 2, 71; *duricia*, Ps. 1, 12, 18; *iniusticia*, Merc. 1, 1, 50; *malicia*, Ps. 2, 4, 15; *blandiciae*, Bac. 4, 9, 40; *mundiciae*, *molliciae*, Ps. 1, 2, 40. At the same time I admit that the editors of Cicero, Sallust, and Livy do wisely in preferring the form with *t*, as being supported by the very best MSS., and therefore probably the received orthography of their day. Yet on the other hand *planicies* is the form preferred by Nipperdey in Caesar, B. G. 2, 8, 3; 3, 1, 5; 7, 46, 1; 7, 70, 1; and B. C. 1, 43, 1. At the same time I entertain no doubt that there coexisted a pronunciation with a *c*, and that this was the more genuine and older form, and so to be retained for Plautus and perhaps Terence.

Thus as with substantives, so with adjectives I contend that those Latin and Greek adjectives which end in *o* or *i* or *v* are all in form diminutival, and have lost a final guttural.

But over and above this many take a diminutival suffix of a liquid form, and this habit is shared by other of the allied languages. Thus with an *r* we have *ten-er-o*-, *ac-er-i*-, *αἰσχ-(ε)ρ-o*-, *γλυκ-ερ-o*-, *bitt-er* (Grimm, 2, 134); with an *l*, *μεγ-αλ-η*, *ὀμ-αλ-o*-, *garr-ul-o*-, *pat-ul-o*-, *long-ul-o*-, *mick-le*, *litt-le*, *ev-il*; with *n*, *ικ-av-o*-, *στυγ-v-o*-, *mag-n-o*-, *ev-en*; with *m*, *θερ-μ-o*-, *for-m-o*-, *al-m-o*-, *cal-m*, *war-m*. I have ventured to include the word *mickle* in spite of what Grimm says (3, 687): "In dem Adj. *leitils* kann nicht wohl eine Diminutivbildung *nl* gesucht werden, da diese Form gerade in dem entgegengesetzten *mikils* waltet," for there can be no valid objection to our attempting to soften the idea of 'great' or 'much;' and in fact our colloquial language readily admits the form *biggish*.

It may as well be observed, that, as with diminutival substantives, so with adjectives of like form. the liquid of the suffix is apt to vary in words of cognate languages. Thus G. *dunk-el* 'dark,' O. S. *dunk-ar*; O. G. *suanh-al* 'thin' = A. S. *swanc-or*; E. *little*, Go. *leitil* = O. N. *lit-in*-, Sw. *lit-en*, Dan. *lid-en*; *μεγ-αλ-η* goes with L. *mag-n-o*-, *ὀμ-αλ-o* = E. *even*; *ἀπ-av* = L. *om-n-i* = E. *every*; and here it may be added that as *omni*- superseded a theoretical *omnic*-, so *every* in fact was preceded by an older *everich*; and further that the *o* and *m* of *ὀμαλο*- and *omni*- obey the law that holds between the two languages when they are represented by *e* and *z* in the E. *even*, *every*. Compare too as regards vowels the Gr. *ἀπav*- E. *every* with the L. (*a*)*malus* E. *evil*.

CHAPTER XX.

COMPARATIVES AND SUPERLATIVES.

IN examining the form of comparatives, I start from the Gothic, in which (see Grimm) there present themselves two leading varieties, *iza* and *ōza*; as first, *áir-iza* 'earlier,' *ald-iza* 'older,' *bat-iza* 'better,' *fav-iza* 'fewer,' *juh-iza* 'younger,' *minn-iza* 'less,' *rap-iza* 'easier,' *spéd-iza* 'later,' *sut-iza* 'sweeter,' *vairs-iza* 'worse,' etc.; and secondly a smaller list in *oza* as: *frum-oza* 'former,' *garaiht-oza* 'more just,' *frod-oza* 'more prudent,' *svinþ-oza* 'braver,' etc.

Then again in old German we find a corresponding pair of suffixes, viz. *iro* or *ero* in place of *iza*; *áro*, more commonly *óro*, in place of *oza*; an *r* in German being the ordinary substitute for a Gothic *z*. Examples are *ér-áro* 'earlier,' *liab-áro* 'dearer,' *gewiss-áro* 'more certain,' *jung-óro* 'younger,' *mer-óro* 'greater,' *frot-óro* 'more prudent,' *mahtig-óro* 'mightier,' by the side of *ér-iro* or *ér-ero* 'earlier,' *alt-iro* or *alt-ero* 'older,' *jungiro* or *jung-ero* 'younger,' *lieb-ero* 'dearer,' *mér-iro* 'greater,' *minn-iro* or *minn-ero* 'less,' *pezz-iro* or *bezz-iro* 'better,' *suaz-iro* 'sweeter,' *wirs-iro* 'worse.'

Again the superlatives, formed as they no doubt are from the comparatives, exhibit the same variation of the vowels. Thus in Gothic, by the side of *lasiv-óst-ai* 'infirmiora' (Cor. i. 12, 22), and *arm-óst-s* 'poorest,' we have *frum-ist-s* 'foremost,' *hauh-ist-s* 'highest,' *minn-ist-s* 'least,' *bat-ist-s* 'best,' *spéd-ist-s* 'last,' etc. In old German superlatives in *óst* are *man-eg-óst* 'most numerous,' *hevig-óst* 'heaviest,' *hoh-óst* 'highest,' *lazz-óst* 'last,' *hart-óst*

'harde t,' And not unfrequently the two forms coexist, as *ober-ost* or *ober-ist* 'uppermost,' *nider-ost* and *nider-ist* 'nethermost,' *eben-ost*, *eben-ist* and *eben-est* 'most even.' Now the short vowel *i* or *e* in the one set, and the long *a* or *o* in the other are so thoroughly different alike in strength and quantity, that the one can scarcely be only a variety of the other; and so I am invited to the belief, that an older form must have contained both, viz. *ioz* or *iaz* for Gothic, *iur* or *iar* for O. German. But this, so far only a theory, that the original forms were possessed of the two vowels, is placed beyond doubt by what is seen in the old Saxon, for here, over and above such forms as *ald-iro* 'older,' *minn-ist* 'least,' occur *suot-iero* 'sweeter,' *scón-iero* 'more beautiful,' *wód-iero* (as well as *wód-ero*) 'better,' and *rik-eost* or *rik-east* 'richest,' *scon-iost* 'most beautiful.'

Again the omission of one of the two vowels in the suffix, as just seen in Gothic and old German, has its parallel in the classic languages, the *i* having vanished from *minor*, *plures* (older form *pleores*), *primores*, *secus*, the prep. *pos* (aft. *post*) as cut down from *op-ios*, a comp. of *ob* (see Essays). *Πεπων* (-ovos) too is no doubt a comparative, *πεπ* alone belonging to the positive, as is the case with *πεπ-αιτερος*; and in the same way I claim *γερων*,* which meant rather 'an elder' than 'an old man,' being a term of respect like *signor* (*senior*). On the other hand I do not include *μαλλον*, which probably in sound was equal to *μαλ-ιον*, nor the contracted forms *θασσων*, *ελασσων*, *μασσων*, *βασσων*, *βρασσων*, *πασσων*, *ῥσσων*, *κρεισσων*, *γλυσσων*, *μειζων*, *ολιζων*, for in these also the *σσ* and *ζ*, as palatal letters, grew out of *χι*, *γι*, etc., and so carried with them something of the *i* sound, being pronounced, as I believe, *σσ* like our *sh*, *ζ* like our *j*, as I have already said above. Again as with these, so with the Doric *καρρων*, which probably represented even in sound an older *καρ-ων* 'harder.' Similarly *αμεινων* and *χειρων* had probably passed through a form *αμεινων* *χερρων* from a preceding *αμει-ων* (= *mel-ior*) and *χερ-ων*

* The *τ* of the oblique cases I hold to be an outgrowth from the *ν*. Similarly *κρειων* (*κρεων*) 'master' must also be a comparative and indeed = Dor. *καρρων*, for the notion of 'stronger' is for 'a master' all essential, yet here again we have a *τ*, *κρεοντος*, etc.

(cf. Bopp, § 300).* On the other hand the strong vowel has been lost in *magis*, *potis*, *nimis*, *satis*, *πρῶν*, *πλεον*; to say nothing of prepositional words, as *ἀμφις* *οπισω*, etc., of which more hereafter. And above all I must refer to the Greek superlatives in *ωτος* and Sanskrit in *ishtha*, assuming that these are deduced directly from comparatives, and so also to those forms where a superfluous *is* precedes the suffixes of comparison, as *πτωχιστερος*, *αριστερος*, *sinister*, etc. I have given to some of the forms just quoted a long vowel. *Πρην* I hold to represent an older *πριον*, or perhaps *προ-ιον*; on which theory a long vowel was to be expected, and such is often the quantity of the particle in Homer. So too the *pris* of L. *priscus* and *pristinus* is but a shortened form of *prius* or *prios*, the *t* in the second adjective being excrescent; and *prius* itself in the old drama was ~~itself~~ often a monosyllable as in :

Príusquam lucet ádsunt; rogítant nóctu ut somnum céperim.

—Pl. Glor. 3, 1, 15.

Pergín 'stue *príus* díiúdicare quám scís quíd uerí siet?

—Ter. Haut. 2, 2, 8.

Add Pl. Curc. 5, 2, 70; Enn. trag. 15 and 235, Ribb.; Ter. Andr. 2, 1, 11; Hec. 3, 1, 7, and 13, etc. etc.

So again *potis* and *magis* have a long *i* in—

Satís 'sse nobis nón *magis* *potís* est quam fungo ímber.

—Pl. Stic. 5, 7, 5.

Nam equidém me iam quantúm *potís* a uíta abiudicáre.

—Pl. As. 3, 3, 17.

Túm *magís* id dícas. Quodnam quáeso? Eunuchum. Illum árbítror.—Ter. Eun. 2, 3, 165.

Quod tú si idem facerés, *magís* † in rém et uostram et nostrám 'sset.—Ter. Hec. 2, 2, 7.

* Compare the explanation of the dipthong *ει* in the first aorists *εσπειω εστειλα εγειναμην*, and of *ει* or *αι* in the feminine adjectives *τερπεινα, μακαира, ταλαινα*, in p. 230.

† See Wagner's note on the passage. Of course the chief reliance is on the first and third of these lines, since in the second and fourth much liberty might have been claimed for a final at the close of the second *dipodia*.

The line from the Eunuch, as standing in the MSS., is admittedly too long for the metre. The reading I here give omits *hercle* after *quaeso*, as wholly out of place; and *ne* after *illum*, as superfluous; and this I hold to be more reasonable than Bentley's correction by cancelling *tum*. But a few remarks on *potis*. As soon as this word is regarded as a comparative, *i.e.* as representing an older *potios*, we see in the first place why *potis* and its corrupted form *pote* are available alike for all genders. Indeed Donatus (ad Ter. Andr. 2, 3, 11) illustrates the variety *potis pote* by, what was for him a thoroughly parallel example, *magis mage*. For the use of *potis* as a neuter, take: "Quod numquam potis est sciungi," Lucr. 1, 452 (add 5, 719); and "Qui potis est? inquis," Catul. 72, 7; and conversely for *pote* as a masc.: "Nec peccatum a me quisquám pote dicere quicquam," Catul. 67, 11; "Nec iam emptor pote ex empto uendito illum damnare, si non tradat," Varr. r. r. 2, 2, 6. Add Prop. 2, 1, 46. Further it may be observed that *potestas* and *maiestas*, by preserving the *s* in this formation, stand wholly apart from *ciuitas*, *nobilitas*, etc., as derived from *ciuis* and *nobilis*; and so tell us that in *potis*, as in *magis*, the sibilant is part of the theme. Lastly, the very notion of a comparative is in keeping with the use of *potis* and *magis* in the derivatives *potiri*, *potestas*, *maiestas*. As regards the first pair, it is not enough that a man should be strong to overcome an enemy or an obstacle, he must be the stronger of the two; and again the *maiestas* of a magistrate drops for the time, as soon as he is in the presence of a superior magistrate. Hence Freund is more correct when he traces *maiestas* to *maius*, than his followers who refer it to *magnus*. It may be noted too that ἡσσανομαι, 'be defeated,' was formed on the same principle from a comparative, ἡσσων.

But to return from this digression, as soon as we arrive at the conclusion that *ioz* or *iaz* for Gothic, and *ior* or *iar* for the old German dialects, are well established suffixes of the comparative, we are brought close to what is seen in the Latin suffixes *ios*, *ior*. The Greek suffix also, *ιον* of *αἰσχ-ιον*, etc., differs only in obedience to the habit of this language, which usually has an *ν* where the Latin has an *s*, as *γραφόμεν* compared with *scribimus*, *γραφετον*

with *scribitis*. But these suffixes, *iov* and *ioš* (*ior*), Bopp (§ 298 *a*) justly identifies with the suffix *iyas* or rather *iyans* of the Sanskrit comparative, the one difficulty about the long *i* of the latter being explained by the long *i* of the Greek comparative, as *βελτ-ιον*. The connection is confirmed by the fact that a Gr. comp. in *ιον* habitually goes with a superlative in *ιστος*, *βελτιων*, *βελτιστος*, just as the S. comp. in *iyans* with a sup. in *ishtha*.

In the first syllable of *ishtha* (as the suffix of such superlatives) Bopp (§ 298 *a*) recognizes a contraction of *iyas* or *yas* (the corresponding suffix of comparatives), so that the suffix of the highest degree of comparison is properly *tha*. This I hold to be substantially right, leaving however the question open whether we should claim for the second suffix *tha* or merely *a*, whether in Greek we should make the division *βελτιστ-ος* or *βελτισ-τος*, seeing that an excrecent *τ* (or *th*) after an *σ* is so common; and again, *τος* and *ος* are alike well fitted as symbols for the desired suffix, for in either form I believe we have the definite article, either *τος* as that older nominative whence the neuter *το* and the oblique forms derive their initial *τ*, or *ος* for *ός*, the loss of the aspirate naturally accompanying such a use of the pronoun, as seen in the O. N. declension of the definite adjective *sveinn-inn*, etc., in place of *sveinn-hinn* (Rask's Gr. § 171). In the passage from *βελτιον* to *βελτις* we find two changes, both of them thoroughly reasonable, the loss of the *ο* as already considered, and an *σ* in place of an *ν*, just as in *σωφροσ-υνη* from *σωφρον-*. With the formation *βελτιστος* we must of course identify that of the Go. *batists* and other similar Teutonic superlatives, including our own ordinary forms, as *longest*. I have just said that such a use of an appended definite article is well fitted for the expression of the idea, and this on the ground that among many betters, the one that is *κατ' ἐξοχην* 'the better' is 'the best' of all, or as the French with good reason express it, *le meilleur*.

But the other more common variety of comparatives and superlatives claims our attention, viz. what is seen in the S. *punyatara*, *punyatama*, from *punya* 'pure'; the Zend *huskótara*, *huskótēma*, from *huska* 'dry'; the Gr. *σοφωτερος σοφωτατος*, *δευ-*

τερος δεινοτατος. Now the *t* in these forms is very generally treated as part of the suffix; and indeed Bopp refers the suffix *tara* to the S. verb *tar* or *tā* 'transgredi,' and treats it as akin to the Z. prep. *taró* 'over,' the Erse *tar* 'beyond,' L. *trans*, and G. *dur* of *durch*. From this view I venture altogether to dissent, holding, as I have repeatedly said, that an earlier form of σοφο-δεινο- (and so also with the S. and Z. adjectives) had a final guttural *κ* or *χ*; secondly that this theoretic σοφοκ (σοφοχ) threw out an excrescent *t*, which led to the destruction of the guttural, just as *νυχ* (of *νυχα νυχιος*) led to a form *νυκτ-*, *noet-*, and so ultimately to the Italian *notte*. Similarly in my view the *τ* is excrescent in *αριστ-ερος*, *βελτ-ερος* (cf. *βελτ-ιωρ*), *φιλτ-ερος*, and even in such a form as *οψιαιτερος*, standing as it does for *οψιεστερος*. Add to these *mag-ist-er*, *min-ist-er*, *sin-ist-er*, *dexter* (for *dec-ist-er*), which are in origin comparatives; the derivation of *minister* from *manus* being simply ludicrous. On the other hand those who assign the *τ* to the suffix have to explain forms like *εν-εροι*, *inf-eri*, *sup-eri*. Exactly in the same way I would divide the superlatives *punyat-ama*, *huskót-ěma*, *σοφωτ-ατος*, *δεινοτ-ατος*, *post-umus*, *ult-imus*, *int-imus*, *ext-imus*, treating the *t* again as excrescent. And here too I point to *μεσ-ατος*, *νε-ατος*, *εσχ-ατος*, *ἐπ-ατος*, *πρωτος* for *προ-ατος*, *ἴμος* for *in-imus*, *συνμος* for *sup-imus*, *πρῶμος* for *pro-imus*. Add to these the Go. *mid-uma* = *μεσατος*, *hind-uma*, *spéd-uma*, etc., O. G. *met-amo*, *spat-umo*, etc., A. Sax. *med-ema*, *hind-ema*, *inn-ema*, *nīð-ema*, *norð-ema*, *suð-ema*, *west-ema*, *uf-ema*, *ut-ema*, *lūt-ema*, *for-ma*; whence the A.-Saxon *nīdem-est*, *utem-est*, *latem-est*, and our own *midm-ost*, *hindm-ost*, *inn-ost*, *utm-ost*, *form-er* and *forem-ost*. Bopp (§ 293 a) finds a superlative suffix in many of the ordinal numbers, and to this doctrine I give an undoubting assent; and here again we have *ἐβδ-ομος*, *ογδοος* (for *ογδ-ομος*), *εν-ατος*, *δεκ-ατος*, *dec-imus*; and that the *t* in *septem* and *sept-imus* is excrescent seems to be proved by the Lith. form *sek-mas*, as well as by our own *seven*; and lastly, *πεμπῶτος ἐκῶτος* *quin(c)'tus sex'tus* may well have been shortened from forms in *ατος*. The doctrine which thus identifies the suffixes of the ordinal numerals with those of the superlative derives additional strength from the fact that the second in the series of ordinals exhibits,

as it should exhibit, an unmistakable likeness to the suffix of comparatives in *alter* and *δευτερος*, etc.

But to return to the question whether the *τ* in *σοφωτερος σοφωτατος* etc., belongs to the suffixes of comparison or not. Bopp (§§ 294, 295) appeals, in support of his doctrine, to the prepositional forms, as the Gothic *undar*, *vithra*, *hindar*, *sundar*, corresponding to the G. *unter*, *wider*, *hinter*, *sonder*; the Go. *aftra*, E. *after*, the G. *nieder*, E. *nether*; and *fürder*, our *farther* or *further*. But in carrying out his theory he is brought to strange results. The *sun* of his *sun-dar* he is bold enough to identify with the S. prep. *sam* 'with' (one I suppose with the Gr. *συν*, L. *cum*); and this although he himself is alive to the utter difference of meaning. The Go. *vi-thra* has for him in its first element the analogue of the S. prep. *vi*, which denotes, he says, 'Trennung, Zerstreung.' Had he traced some of these words to their cognates in English, he would probably have had some doubt as to the value of his argument. The Go. *vithra*, G. *wider*, can never be separated from our prep. *with*, as at once appears from a comparison of the E. verb *withstand* and the G. *widerstehen*, for although *with* in itself denotes union, there is union for hostilities as well as for kindly offices, *pugnare tecum* as well as *quocum mihi amicitiam respublica conciliauit*. Nay in A.-Saxon *wið*, as a mere preposition, has the meaning of against, as *wið þinum willan* 'against thy will'; and similarly in Norse *við*, when followed by a dative, has the same power. Then again the modification of meaning is precisely what we see in the Latin comparativum form *contr-a*, compared with *con* or *cum*. *Nidar*, *nieder*, *hindar*, *hinter*, cannot but owe the *d* or *t* to the first element, seeing that we have *neath* and *beneath* as well as *neth-er*; for Go. *hindar*, G. *hinter*, compare our *hind*(wheel), *hindmost*, *behind*, as well as the verb *hind-er*. *Sundar* (*sonder*) must surely be akin to the Lat. *sed*, *se*, and *sine*, and if so, *er* alone belongs to the suffix. So too, as our *furth-er* is deduced from the simple *forth*, *er* again must be the suffix of *fürd-er*. Then for *after* it is enough to look at our simple preposition *aft* to know that Grimm is right in the division *aft-uma* (ii. 260), and consequently that the comp. *aft-er* should be similarly

divided; and that the *t* is no true part of the word is abundantly shown by the G^o. *afar*, O. Germ. *avar*, of like meaning, and the S. *apara* 'posterior.' (See too Essays, p. 120.) As to the German *unter*, L. *inter*, I have shown elsewhere (ib. p. 38) that two words of different and, it so happens, of opposite meaning, have fallen into an identity of form. The inseparable *unter* as in the G. *unter-halten*, *unter-nehmen*, E. *under-take*, L. *inter-uenire* 'to turn up unexpectedly,' has for its original power the sense of 'up,' and so corresponds to the G. *ent-*, Gr. *av* of *ara*; while *unter* of G. *unter-gehen*, E. *under-neath*, L. *inter-cus*, is the comparativel form from G. *ein*, E. *on* and *in*, L. *in*. But in both cases the *t* or *d* is an excremental letter. The relational comparatives Gr. *ποτ-ερος*, *κοτ-ερος*, S *kat-aras*, Lith. *kat-ras*, L. (*c*)*ut-er*, E. *wheth-er*, are all divided, or would be divided, by Bopp, so as to give the dental to the suffix; but I have already given, and shall have to repeat below, my reasons for claiming this letter as part of the theme. Again from the first of the cardinal numerals is formed a comparative with the sense of 'one of two' or 'second,' as *έρ-ερος*, *alt-er*, S. *ant-aras*, O. Prus. *ant-ars*, Lith. *ant-ras*, Norse *ann-ar*, G. *and-er*, E. *oth-er*. In the first of these the original dental *n* (of *εις* for *έρς*) has passed into a dental mute, in the last into the dental aspirate; and the latter transformation is placed beyond a doubt by the Lincolnshire provincialism *toner* for 'the other' (Essays, p. 175); and also by the fact that the Norse *annar* has for its dative m. s. *öðr-um*, n. s. *öðr-u*, pl. *öðr-um*, where the 'unlanted' vowel corresponds to what is heard, though not written, in our own word.*

But the moment we admit that the true division of the S. and Gr. words is *πρωτ-αρα*, *σοφωτ-ερος*, we arrive at the very suffix

* Aliter (to borrow a term from Apicius' Cookery Book). Those who dissent from this division of *σοφωτ-ερος*, *σοφωτ-ατος*, *πρωτ-αρα*, *πρωτ-ατα*- (and the question has its difficulties) will arrive at the same conclusions as those for which I have contended, if they start from a pronominal stem *το-* 'this' in place of *δ-* 'this'; for the forms with an initial *t* are well known to Sanskrit, as well as Greek, and even to Latin in the adverbs *tum*, *tam*, probably in *iamen*, and, certainly, in the adjectives *talis*, *tentus*, *tot*; and to the Teutonic family under the usual change of *t* to *d* or *th*.

which is so commonly found in the Teutonic family; and thus *alt-ero*, *minn-ero*, *βελτ-ιον-*, *βελτ-ερο-*, and *bett-er*, *wis-er*, have at bottom a common suffix.

But if superlatives of the form *βελτιστος*, S. *kshepistha*, are deduced, as is justly contended, from comparatives in *ιον*, *ίγας*, the enquiry is suggested whether a similar explanation can be given for *σοφωτατος* as growing out of *σοφωτερος*, for *punyatama* as growing out of *punyatara*. As regards the Greek pair of words an answer in the affirmative may I think safely be given, for I cannot but reject Bopp's earlier theory that the *τατ* of *σοφωτατος* represents the S. vb. *tan* 'ausdehnen,' the same of course with *ten* of *tendo* and *τεινω*; and indeed he himself subsequently abandoned his theory, giving a preference to the idea that *σοφωτατος* superseded a lost *σοφωταρτος*. But the direct interchange of an *r* and *t* may be asserted on the evidence of *ήπαρ ήπατος*, *ιδωρ ιδατος*, and our own *where-in*, G. *war-ein*, compared with our *what*, *therein*, with *that*, nor does it seem necessary to assume intermediate forms, *ήπαρτος*, *ιδαρτος*. Thus in *σοφω-^τατος*, *os* rather than *τος* seems to be the representative of the definite article, so as to constitute the idea 'le plus sage.'

But how are we to deal with those superlatives which exhibit an *m*, as the S. *punyatama*, L. *opt-umus*, *min-imus*, *post-umus*, *longissimus*, Go. *mid-uma*, O. G. *met-amo*, A.-Sax. *med-ema* (= *μεσατο-*), whence our own *mid-m-ost*? Analogy with the formations so far considered suggests that it would be satisfactory, if we were to find that here too the *m* belonged to a comparativel suffix, so that, as before, *us* or *os* should represent the definite article; and by good fortune we come upon a series in the Lapp language, which supplies with something like accuracy all we could desire. Thus Fjellström's Grammar (p. 22) has :

bu'ore 'good,' comp. bu'oreb, sup. buremus;

and secondly, with a suffix identical with our familiar *ak* :

bu'orak 'good,' comp. bu'orakub, sup. 'bu'orakumus;

while Rask's Grammar (p. 75) has what is practically the same :

haréc 'quick-footed,' comp. hareceb, sup. harecamus ;

vavos 'strange,' 'rare,' comp. vavoseb, sup. vavosamus.

The difference between *b* and *m* is of the slightest, and even this difference all but vanishes when we find that in Lapp a final *m* and final *b* are readily interchanged. Thus in the first person of the verb *Fiellström* (p. 56) expressly says:—"Prima conjugatio in *am uel ab*, ut *jackam jackab* 'credo'; secunda in *om uel ob* ut *molsom molsob* 'muto'"; and again in the so-called first imperfect we find (p. 59):—"S. *mon jackib* 'credidi,' D. *monno jackimen*, Pl. *mije jackime*, 'credidimus,'" where *b* of the singular has *m* as its representative in the dual and plural. Observers will see here good evidence that there is a tolerably close affinity between the Lapp and our Indo-European stock. Even the stem of *bu'ore* has more than accidental similarity to the Ital. *buono*. But of this affinity hereafter.

Let us now cast an eye back on the several varieties of the comparative and out of them endeavour to build up that fuller form which constituted the original suffix. The Latin *suau-ior* and the O. Sax. *scon-iost* 'fairest' give us what are substantially identical *ior* and *ios*, while another O. Sax. superlative *rik-cost* 'richest' substitutes an *e* for the *i*, a change which is frequent before a strong vowel, and is especially seen, as already noticed, in the declension of *is ea id*, and the conjugation of the verb *ire*. Again in another O. Sax. variety *suot-iero* we find for the second vowel an *e* in place of an *o*, but this *e* owes its presence to the following *r*. But in *suot-iero*, σοφωτερο-, and the L. *altero*-, etc., we have yet another letter, viz. an *o*. To these I now add on the authority of the Lapp, backed as it is by that of so many superlatives, a final *m*, with the result that we have something like *eorum*, for a *u* rather than *o* appears in *umo*- of Latin superlatives. But this *eorum*, as interpreted from the Latin, supplies precisely what is needed for our purpose, 'the wise one of them, A and B,' 'the wiser of the two.' Nor let it be objected that by the gratuitous limitation to the number two I am making all smooth for my argument, for the first and simplest idea of comparison contemplates but two objects. This theory however will be of little avail, unless it be shown that this pronoun was known to the several languages

of our stock. In Gothic it is complete, as: n. *is*, ac. *ina*, g. *is*, d. *imma*, with a neut. *ita*, etc. In Sanskrit again Bopp felt so sure of its original presence that he has ventured to give (§ 362) a complete declension on theory, inferring its existence from certain secondary forms, as the adv. *itas* 'hinc,' *idam* 'dieses;' and he even includes *itaras* 'der andere,' but this is of course one with the Gr. *ἐτ-ερος*, and so simply a comp. of an adj. = *év-* 'one,' just as our *oth-er* is of *one*. The Zend again has *yim* 'hunc;' while for Lithuanian and old Slavic the declension is complete, and indeed has been already given at length (p. 249). In Latin over and above the regular declension we have the adverbs *eo*, *ibi*, and *ita*, and the derivative *idem*, besides others about to be mentioned. In Greek again we come across words of pronominal character which seem to contain our stem; but these are for the most part so mixed up with aspirated forms, said, and often with reason said, to belong to the reflective pronouns *ἐί*, *οί*, etc., that it is difficult to draw the line between them. But as the L. pronouns *is ea id* and *hic haec hoc* are of one origin, always excepting the final *c* of the latter, such confusion was natural. Under the possessive *έός* L. S. remark that it is not merely reflexive but answers to the L. *ejus* as well as *suus*. In another passage they say: "*ί* or *ι*, as nom. of the reflex. pron. *οὐ* 'sui,' of which we have nom. *ι*, Soph. Fr. 418;" but surely a nom. of a reflective pron. is impossible. So far our search in Greek has not been very profitable, but greater success will be attained if we start from an older theme of our pronoun. Ritschl (in the Rhein. Mus. n. f. 14, 480 note) drew attention to 'Is locvs' in an inscription, justly inferring from the unusual height of the first letter that at the time when this was written the nom. *is* had a long vowel; and my own belief is that this points to *in*, as an earlier theme of the pronoun. In the sequel it will be contended that all pronouns of the third person originally ended in an *n*, especially the interr. or rel. *quis* (*qui*) as shown by the form of its Greek equivalent *τις τινος* and by the occasional long *i* of *quis* itself in the old language; but of this more hereafter. I shall here assume then that *in* was the base of the pronoun *is ea id*; and so account for the L. g. *inde* (for *ind-is*,

with an excrescent *d*) and the \tilde{G} . g. $\epsilon\bar{\nu}\theta\text{-}\epsilon\bar{\nu}$, where I make the θ excrescent, though others may prefer the division $\epsilon\bar{\nu}\text{-}\theta\epsilon\bar{\nu}$, an adverb which some strangely refer to the preposition $\epsilon\bar{\nu}$ in defiance of the meaning of the word. For a dative I put forward the old *in-ibi*, as an earlier form of *i-bi*, and this with the advv. *post-ibi* and *inter-ibi* before my mind, which seem at first sight to justify the old doctrine that the first syllable of *in-ibi* is the preposition, and which I should be less willing to oppose, if I did not call to mind that such use of the preposition would be of no value, as the suffix already represents this idea. For an accusative I point to the so-called conj. or adv. $\acute{\iota}\nu\text{-}\alpha$, which L. S. derive “from the old person. pron. $\acute{\iota}$ or $\acute{\iota}$,” assigning to it, as an adv., the meanings ‘ubi, quo, quando.’ Of these three I give a decided preference to *quo* ‘whither,’ a meaning admitted by L. S. (who refer to: $\epsilon\varsigma$ βουλήν, $\acute{\iota}\nu\alpha$ μιν καλεον Φαιηκες αγανοι, Od. 6, 55, and to 4, 821); but relegated to a subordinate place; while they assign to the first section such passages as: οὐκ ὄρας ἔν’ εἰ κακοῦ (Soph. Aj. 386), comparing, as also does Matthiae (§ 357), the Latin construction *ubi terrarum*. But here too I would interpret the words by *quo redactus es mali* ‘see’st not to what a depth of misery thou art brought down,’ just as Cicero (Att. 8, 10) says: *Respondit se quod in nummis haberet nescire quo loci esset*, ‘to what straits he was reduced for ready money.’ What decides me in favour of this view is that the other use of $\acute{\iota}\nu\alpha$, when called ‘a conjunction’ or ‘final conjunction’, is justified in precisely the same way as the Lat. *quo* ‘to the end that,’ ‘in order that,’ $\acute{\iota}\nu\alpha$ θασσον ἵκηαι $\epsilon\varsigma$ Πυλον ηγαθεην. This interpretation of the particle $\acute{\iota}\nu\alpha$ then recommends itself by its simplicity as regards alike form and meaning. I may add that the Gothic declension of the pronoun confirms what has been here seen both by its acc. *ina* and its dat. *im-ma*, where the first *m* is only to be explained as representing the nasal of the theme. Assuming then a pronominal theme *i* or *in*, represented in the Lat. $\acute{\imath}$ s with an older $\acute{\imath}$ s, as once familiarly known to the whole stock of the Indo-European languages, I proceed to enquire whether the comparatives in the other languages admit of explanation in the same way as the L. comparative does from a suffix repre-

senting *eorum*. Now the Greek $\tau\omega\nu$ of $\beta\epsilon\lambda\tau\text{-}\tau\omega\nu$ is a thoroughly satisfactory gen. pl. of a base ι . Then the S. suffix in its fullest variety $\hat{i}\text{-}yan\text{-}s$ adds to the theme \hat{i} a genitival suffix in yan (cf. p. 239), and one of plurality in the s .

It has been objected that the long \hat{i} of $\hat{i}yans$ and $\beta\epsilon\lambda\tau\omega\nu$ is at variance with the short vowel of *eorum*; but this difficulty vanishes, when we call to mind that for the old authors a long e is often seen in the Latin pronoun, and this not merely in the g. $\bar{e}\text{-}ius$, but in the dative ei , namely, Plaut. Capt. 5, 1, 20, and Ter. Hec. 5, 3, 32 :

Pró benefactis $\bar{e}ius$ (monos) ut $\bar{e}i$ prétium possim réddere ;

Referétque gratiam $\bar{e}i$ unaque nós sibi amicos iúnget ;

where I omit *opera* as a gloss ; and by this simple proceeding save the line from Bentley's violent deviations from the MSS., and from the ugly result that the first three syllables of *refert gratiam* are to do duty for an iamb. Add Pl. Curc. 4, 3, 12 ; Ter. Haut. 4, 5, 29 ; and four instances from the 6th book of Lucretius, vv. 674, 710, 729, 795.

The comparative implied in superlatives such as the L. *post-umo-* and S. *punyat-ama-*, ends in *um* or *am* and so bears little trace of our \hat{i} ; but if the \hat{i} has been lost, as already seen in *minor*, *primores*, etc., we should come to a once existing *iūm*, which would well correspond to the Greek $\omega\nu$ or $\iota\omega\nu$; and I think I see the fuller suffix actually preserved in *nim-iūm*, which by its meaning ought to be a comparative, like its equivalent *nim-is*. Nor is it a grave objection to such a theory that we have an adjective *nimius*, of which *nimium* is commonly supposed to be the neuter, for I should rather reverse this, regarding the adj. as itself formed from *nimium*, by one of those violent proceedings seen in the formation of possessives, as *noster*, *-a*, *-um* from a gen. *nostrum*, *meus*, *tuus*, *suus*, from the gen. *mei*, etc., $\eta\mu\epsilon\tau\epsilon\pi\omicron\varsigma$ from some such lost gen. as $\eta\mu\epsilon\tau\text{-}\epsilon\pi\omega\nu$, of which $\eta\mu\epsilon\tau$ is the theme corresponding to the S. *asmat*, with $\epsilon\pi$ as a genitival suffix, and $\omega\nu$ for plurality. Exactly in the same way I am disposed to look upon the S. *am* of *punyat-am-a* as corrupted from an older *i-am*, again corresponding to the L. *i-um*. It is true that

on this theory we have little trace of a genitival suffix, but the same objection applies to *deum* which we know to have been compressed from *deorum*; and indeed the Greek gen. pl., *ἀνδρ-ων* for example, as deduced from a theoretic *ἀνδρσοῦν*, while it exhibits the nasal symbol of plurality, has wholly lost the sibilant, which is the chief element of the case ending. In such suffixes we must always be prepared to expect violent contractions.

The doctrine that *σοφωτερος*, to take this as the representative of comparatives in general, meant originally 'the wise one of them,' is in keeping with the German habit of prefixing the g. *aller* to superlatives, as *aller-best*, *aller-heiligst*, *aller-höchst*, a combination which was familiar to our own old poets, as Chaucer (v. 712): "But alderbest he sang an offertorie." Add "altherfirst," vv. 9492 and 10,863. Moreover the use of the genitive with the Greek comparatives seems in this theory to find its explanation. For example the phrase: ὁ υἱὸς μείζων ἐστὶ τοῦ πατρὸς, seems to have been stripped of the words *καὶ τοῦ υἱοῦ*, 'the son is the greater of the two, his father and himself;' but as the son is already mentioned in the subject of the sentence, the omitted words were to some extent a superfluity, and so with good reason dropped. On no other theory can we defend Milton's language: "Adam the noblest of his sons, the fairest of her daughters Eve." A similar omission occurs in: "Who of all others I could wish my friend" (Spectator, 402). Again the French expression, *Lequel aimez-vous le mieux, de celui-ci ou de celui-là*, had probably at first the conjunction *et* in place of *ou*. The Italian also, like the Greek, at times attaches to a comparative what is virtually a genitive: as, *Giovanni agisce più degnamente di Paolo*, 'more worthily than Paul,' where it would be more logical to say, *di Paolo e di Giovanni*.

As many adjectives in the positive take a secondary suffix, to which I am disposed to attach a diminutival power, it follows logically that such a suffix would be wholly out of place in comparisons and superlatives. Accordingly it is the habit of all the allied languages to drop it before attaching the symbols proper to the new ideas. Thus in Sanskrit, as Bopp notes, from

kship-ra 'quick,' there is deduced *kshép-íyas*, *kshep-ishtha*; from *kshud-ra* 'small,' *kshód-íyas*, *kshód-ishtha*. Similarly in Greek the *v* of ἵδus ταχvs is dropped in the formation of ἵδιων ἵδιστος, ταχιων (or rather θασσων) ταχιστος; the *ρ* of αισχρος εχθρος in αισχιων αισχιστος, εχθιων εχθιστος. A suffix αλ is admissible in μεγ-αλ-η, but not in μειζων (for μεγ-ιων) μειστος. So the *n* of the Latin *magnus plenus* vanishes for *maior* (= *magior*), *pleores* aft. *plures*. Nay even the *o* of *longo-* and the *i* of *brevi-*, as representing a corrupted suffix of diminution, could claim no place in a comparative, and accordingly they also are thrown off, before the suffixes of comparison are added. In our own language again the adj. *little* drops its *le* (= *el*), when it forms a comp. *less-er* (for *lett-er*, cf. G. *besser* = E. *better*) and a sup. *least* for *lettest* (cf. again *best* for *bestest*).

At the same time the diminutival suffix is at times retained in such formations, probably because the shorter original adjective having vanished from the language, the power of the suffix was not felt. Of this the very words just quoted σοφωτ-ερο- σοφωτ-ατο-, *punyat-ara- punyatama-*, are examples. So also the forms *laetic-ior*, *tristic-ior*, etc., discussed in p. 254.

There remains yet another formation of the superlative, "known to the Breton and common to it," says Legonidec (p. 58), "with the Hebrew, viz., a reduplication of the positive, as *uhel uhel* 'haut haut,' *izel izel* 'bas bas,' *mád mád* 'bon bon,' *fall fall* 'mauvais mauvais.'"

I pass next to deal with what may be called hypertrophy of the Comparative and Superlative. From our prep. *nigh* were first deduced a comp. *nigh-er*, and a superl. *nighest*, aft. shortened to *near* and *next*. In Shakspeare's 'All's well t. e. w.' (i. 3), we have *next* still used in its original sense: 'A prophet I madam, and I speak the truth the *next* way;' and so, too, *near* in Macbeth, (ii. 4), 'There's daggers in men's smiles: The *near* in blood, the nearer bloody.' But the time came when the comparatival power of *near* was no longer felt, when in fact, it was used for the single 'nigh,' and so *nearer* and *nearest* were deduced from it. Take next the Lat. prep. *ob*, which is one with *επ* of the Gr. *επι*, and probably akin to the verb *ἐπι-ομαι*, the original

vowel being retained in *οπαδος*, *οπαζω*, *οπισω*, *οπισθεν*, as also in the L. *socius* by the side of *sequor*. The earlier meaning of *ob* and *επι* was 'after,' whence *οκ-ειψι* 'the back of the head,' and *επιγονοι* 'posterity.' That the final of *ob* was sounded as a *p* rather than as a *b*, is proved by the parallel cases of *ab* with *απο*, *sub* with *super*, *υπο*, *υπερ*. Hence we must look for an *f* in the Eng. representative of *ob*, and we find it in *aft* with an excrescent *t*; but from this *aft* we have a comp. *after*, while the Gothic has the simpler *af-ar* and *af-ara*, and the S. too has *ap-ara*. Then from *ob* I deduce a theoretic comp. *opios*, which losing its *i* and being decapitated gives *pos*; and this is a preposition now well established, though it has not yet been admitted into our lexicons. From this *pos* again came a comp. *pos-erus*, preserved in "Lib(ertis) libertabus posrisque eorum," Inser. Or.-Henzen 6561; and a sup. *Posimus* in "M(areus) . . . M(arei) f(ilius) Posimus," Grut. Inser. 251, 252, where it seems to be a cognomen of like power with the familiar *Postumus*. But just as, what should have been *af*, threw out an excrescent *t*, so also in place of *pos*, *poserus*, *posimus*, a preference was given to *post*, *posterus*, *postumus*. But this second comp. *posterus* led to a tertiary comp. *posterior*, whence a superl. came in the form probably of *posteris-mus*, shortened to *postremus*. Thus in the theoretic *p-ost-er-is-m-us* we have *p* alone of the root, followed by four symbols of the comparative, if my theory about the *m* be accepted.

In the Old Germ. we find an abundant crop of hypertrophic comparatives from prepositions, as *aft-ar-oro*, *inn-ar-oro*, *uz-ar-oro*, *nid-er-oro*, *ob-er-oro*, *und-er-oro*, *ford-er-oro*. The French too have their *plus-ieurs*. So 'more happier,' 'more corrupter,' stand in Shakspere; 'more happier,' 'more sharper,' in Beaumont and Fletcher; 'more stricter' in Ben Jonson.

But we also find comparatives built upon superlatives, as L. *prim-ores*, Go. *frum-oza*, E. *form-er*; and again superlatives upon superlatives, as *εσχάτωτατος*, *ἀρπαγιστάτος*. So in A.-Saxon by the side of simple superlatives in *ema*, as *ut-ema* etc., we find *ut-em-est*, *nis-em-est*, *äft-em-est*, *inn-em-est*, *yf-em-est*, *fyr-m-est*, *mið-em-est*, *læt-em-est*, *suð-em-est*, *vest-em-est*, *east-em-est*, *norð-em-est*;

some of which reappear in English as *ut-m-ost*, *in-m-ost* (see also Fiedler, Gr. p. 243), etc. Here we must be on our guard against the view which *prima facie* recommends itself, that these are formed by the simple addition of our *most*. Add probably the L. *sinist-imus*, *dextimus* (= *dek-ist-imus*). Nay, the ordinary superlatives in *issimus* seem to represent a lost *ist-imus*, and if so seem to be superlatives built upon a comparative, *turp-iss-imus*. In our own *Most-highest*, we have unmistakably a doubled superlative.

In the Teutonic family it often happens that the weak vowel in the suffix *er* of the comparative has led to a modification of the stem-vowel, as G. *lang*, *läng-er*; *alt*, *ält-er*; and a trace of the same is seen in our own *eld-er*, by the side of *old-er*; and, probably in *better* (for *gwett-er*) from *good* (*gut*). Chaucer too has *lenger*, v. 14437, as an adverb.

But comparatives, when of irregular formation, are at times subject to a curtailment of the whole comparativ suffix; and this limitation to irregular forms has its reasonable explanation in the fact that then only is the new comparative distinguishable from the positive. But this maltreatment is perhaps limited to the use as adverbs, or if extended to adjectives, then only to these, when separated from their nouns. Thus we say 'James the *less*,' but 'the *lesser* light.' '*Bet* is,' quod he 'a pyke than a pikerel' (Chaucer, v. 9293; add 4374, 4534, 5986, 6114, 7533, 10088, 10914); but 'the *better* half.' *Mo*, in our old writers, seems to be always an adverb, the equivalent of 'plus' not of 'maior.' Thus, in Chaucer, v. 546, 'A manciple and myself; ther n'ere no mo'; 'withouten wordes mo,' v. 810; so that, at v. 1937, Tyrwhitt seems to be wrong in calling them adjectives. So in Shakspeare (Oth. iv. 3) *mo women*, *mo men* = 'plus mulierum, plus uirorum.'

In Old G. we find *min* = 'minus'; and *pas* = O. E. 'bet;,' and also a form *sīd* = 'amplius,' which Grimm proves to be a truncated comparative by comparison with the Go. *seifs* of like power. In A.-Sax. there occur the comparatives *lās*, *bet*, *leng*, *ma*, as also *sel* 'melius,' *eð* 'facilius,' by the side of *eaxost* 'facillime,' *seft* 'dulcius' (D. G. 3, 593); and of these *leng* survived

for a time in English, as in 'St. Edward the Confessor' (Phil. Soc. Tr. for 1858, v. 366), 'per hit gan dashe adoun : hit nolde no *leng* abide.' And again v. 510, 'He answered him *le leng* þe worse.'

But in the classical languages the same shortening of comparative adverbs is to be traced. *Magis* for example is first cut down to *mage*, then to *ma* in the old *ma-uclo*, aft. *mālo* : and thus we cannot be surprised to find the same word reduced to *mais* in Fr., as: "je ne puis *mais*," and in *jamais* = *iam magis* ; but of course the so-called conjunction *mais* is the same word ; and in like manner we find in Sp. *mas* 'but' or 'more,' It. *ma*. Again, *sat* should be considered as abridged from *satis* ; and not unfrequently the MSS. of Plautus have *satis* where the metre seems to demand the shorter sound of *sat*. In the same way I am disposed to assume *nim* as an abbreviated pronunciation of *nimis* in "Nimis stulte faciunt meā quidem sententia," Men. 1, 1, 5 ; "nimis sollicitum," ib. 4, 2, 20. That *aut* stands for *alterum* is generally admitted. See Essays, p. 179. An old form of *an* is *anne*, as in "Vtrum aurum reddat, anne eat secum semul," Pl. Bac. 4, 1, 4. Add v. 31 ; Rud. 4, 4, 25. Hence too *an* is long occasionally in the old writers, as "Etiam haut sciam an (so Bembine) uxorem ducat ac Syro nihil gratiae," Ter. Haut. 5, 2, 46 ; and perhaps Catul. 40, 5. This fuller *anne* I believe to stand for a comp. *annis*, like *mage* for *magis*, *pote* for *potis* ; and so to be in origin one with Norse *annar*, G. *ander*, L. *alter* 'one of two.' Thus *an* and *aut* are one in origin, as they are nearly one in meaning. Nay our own *or* is but a compressed *other* (G. *oder*). See Essays, p. 181. So in the Keltic family we find curtailment under like circumstances, as Bret. *mād* 'good,' *gwelloc* or rather *gwell* 'better ;' *drouk* 'bad,' *gwaso* or rather *gwaz* 'worse ;' and again in Welsh, *gwell* and *gwaeth* rather than *gwella*, *gwaetha*.

At times the vowel of the comparative adverb is lost and the consonant *r* or *s* retained. Thus we have Go. *mīns* 'less,' *seī's* 'more,' *suns* 'soon ;' * O. N. *mīnnr* or *mīxr* 'less,' *betr* 'better,'

* So Grimm, 3, 590, in correction of the view that these were genitives, as stated in 3, 88, 89.

heldr 'rather,' etc.; E. *else* = A. S. *elles*; Fr. *moins*. With these Grimm classes, and I think with reason, the L. *mox* as standing for *mox-ius*, and so only a variety of *ocius*; *ocior* being a comparative, not merely to the Gr. *ωκυς*, but also to the L. *uiuos*, so that a commencing labial in *mox* is not out of place; and again the *hiatus* of Horace in "*Iam Daedaleo ocior Icaro*," vanishes on the assumption that as in our own 'one' a *w* was heard though not written. The L. *uix* also he looks upon as a comparative, but suggests no derivation. I cannot however but hold it to be one with *μογis*, in which again I see a comparative, as also in the compound *μογος-τοκος* of Homer; for a derivation from the m. sb. *μογος* could only have given *μογο-τοκος*.

But the shortening of *minus* is well exhibited in a class of Romance words of some interest. I refer to the Fr. *més-allier*, *més-estimer*, *mé-connaître*, *mé-prendre*, for the origin of this prefix is placed beyond doubt, as Diez observes (Rom. Gr. 2, 357), by the Span. *menos-cabar*, Prov. *mens-prendre*, O. Fr. *mains-né*, and It. *meni-possente*. One is tempted to include as akin thereto the G. prefix *mis*, of like power; but this Grimm (2, 470) would connect with the family of words denoting error, such as our own verb *to miss*.

CHAPTER XXI.

COMPLEMENTARY ADJECTIVES.

IN a former chapter the question of complementary verbs was taken into consideration, with the result that much doubt was thrown upon the usual theories. The same I think will be the case with the adjectives about to be discussed. In the forms *αγαθος αμεινων αριστος*, *bonus melior optumus*, *good better best*, there is such a great variety of form that one is tempted at first to acquiesce in the ordinary doctrine that we have here a union of words from different stocks. The same may well be said of *malus* compared with *peior* and *pessimus*, of *evil* compared with *worse* and *worst*. Yet a close examination of these several sets of words will I believe lead to a different conclusion. Thus I feel thoroughly convinced that the three trios first enumerated have each but one common root; as also the pair of trios that follow, in spite of the variety of form. First of all it is in my mind *a priori* probable that words so connected in meaning should be akin to each other; and thus children are constantly heard to defy our grammar, and use *gooder* and *goodest* in place of *better* and *best*. Further it is, as was seen in the case of verbs, especially in the region of words that are most needed for ordinary use, that violent changes of form are found, as in the verbs *ὄπω*, *esse*, *aller*, *go*. Accordingly we must be prepared for similar varieties of form in adjectives that belong to the notions 'good' and 'bad.' And here I may perhaps assume that *αγαθος* and our *good* are one; one also our *better* with *βελτερος*, *βεντερος*, *bonus*, and *bene*; and thirdly, the L. *melior* one with *αμεινων*. But to proceed.

It is commonly taught that the initial *a* of *αγαθος* is but a euphonic addition, and so unknown to our *good* and the G. *gut*;

but this is a point that has already been considered (p. 87); and I there pointed out that the mere fact of an *a* occupying the same position in the comparative* is an argument in favour of the proposition that the vowel belongs to the theme; and I supported this view by pointing out that *optumus* is best explained as standing for *obotumus*, and that for *obon-umus*, which points to a positive *obonus* as the older form of *bonus*; and here again I threw out the suspicion that on the same principle the Italians formed their adverb *ebbene*, and possibly the French their *eh bien*; the repeated vowels, viz. two *a*'s in *αγαθος*, three *o*'s in the said *obono-*, three *e*'s in *ebbene*, obeying the usual law of assimilated vowels.

I take next into consideration the *γ* of *αγαθος* as compared with the labials *μ* in *αμειων*, *melior*; *β* in *βελτερος*, *βελτιων*; *bonus*, *bene*, *bellus*; *better*, *best*. That an initial *γ* is apt to introduce the sound of our English *w* (*v*) is an admitted fact, and has already been discussed, especially in the notice of the Breton forms *gouz-out* 'to know,' whence *gwézin* 'I shall know,' *ana-vézin* 'I shall recognize'; and indeed generally, when *g* is followed by a sound of the *oo* character, if an added suffix contain an *i* or *e*, 'umlaut' leads to a sound *gwe* or *gwi*, as Bret. *gor* 'brood,' inf. *gwir-i*. Exactly in the same way then our adjective *good* in all probability first produced a comp. *gwetter*. Nay *gweed* itself in Aberdeenshire was the ordinary form of *good*, as, 'He's a *gweed*-lad' (Ross's *Helenore*, p. 21, quoted by Jamieson). But it is not only in the past literature that this form occurs; it still lives in the speech of that part of Scotland. Thus we see how the adverb *well* has obtained its *w*. Again the O. German form of *good* is *kuot*, the M. German *guot*, the O. Saxon *guod*. The very same combination of vowels is seen again in *duonus*, which is acknowledged as an older variety of *bonus*, and so accounts for the Ital. *buono* and Span. *bueno*. The passage of a *γ* to a *δ* has already been seen in *Γημητηρ* to *Δημητηρ*; but this interchange of *γ* and *δ* is specially to be expected when the *γ* is immediately followed by a consonant, and the *u* of *guot*, *guod*, is closely akin to a *u*

* I must not say this of the superlative, because *ιστος* being the suffix of that idea, we have only *ap* left for the theme, whereas in *αγαθ-ος* and *αμειων*, i. e. *αμεν-ων* we have two syllables to deal with.

consonans. Thus γλυκς was no doubt for some Greeks one in sound with δλυκς; and hence we see its connection with the L. *dulcis*. Nay one often hears γλυκς pronounced as δλυκς. Here the *d* was probably the older letter. A β also in such a combination was convertible into a γ, as in βληχων or γληχων, the plant ‘pennyroyal,’ βαλανος and L. *glans*; *isinglass*, a known corruption of the G. *Hausen-Blase*, i.e. the (air)-*bladder* of the sturgeon. Again the interchange of the *du* with *b* is familiar in the Latin, as *bis* for *duis*, *bellum* and *Bellona* for the older *duellum*, *Duellona*; by the side of which again we have the Ital. *guerra*, Fr. *guerre*, E. *war*; and this Ital. *guerra* seems to imply that in the harsher language of Northern Italy a form of *bellum* with an initial *gu* was not unknown in classical times. Add the Roman name *Duilius*, also written *Bilius*. I conclude then that an old Latin *guonus* existed as a connecting link between αγαθος and *bonus*.

Next the *aθ* of αγαθος claims our attention; and I take the two letters together because they seem to have an affinity for each other. But *θ* itself is often interchanged both in Greek itself and in the cognate languages with an *ν* (*n*); and when such a change occurs it is generally found that the *a* gives place to an *ε* (*e*). Thus μαθ of εμαθον, etc., is no doubt one with μεν of μενος, με-μ(εν)-ημαι, *mens*, *commentus*, *min* of *me-min-i*. Again βαθος is one with βειθος, where the *θ* is excreseent; so παθος with πειθος; and παθ-ιη ‘a manger’ (= φαρ-ιη), is in root one with the L. *pŕen-us* ‘food.’ But *as* and *at* in Greek share with *aθ* the tendency to give place to *εν*. Thus γαστηρ has assuredly for its analogue the L. *uenter*; ασθμα (possessed of an exerescent *θ*), is akin to L. *uentus* (*t* again exerescent). Hence *aθ* of αγαθος may well correspond to *εν* both in αμεινων (for αμειν-ων), and in *bene bellus* (for *benelus*); and if *bono-* itself has given a preference to *o* over *e*, it has been probably due to the influence of the following *o*. But this *εν* gives place to *ελ*, not merely in *bellus*, where the change of consonant may be chiefly due to assimilation, but also βελτ-ερος βελτ-ων, and the vocative form μελε, ω μελε, and *melior*. That the *θ* of αγαθος is represented by the *d* of *good*, the *t* of the G. *gut*, is generally allowed; and again the interchange of *n* and *t* has been too

often pointed out to need further notice; and thus I find no difficulty in connecting my assumed *obotumus* with (*o*)*bonus*, or *better* with *βεντ-ερος βεντιστος*, *bene*, etc.; while our sup. *best* is of course a contraction from *bet-est*, as *last* is from *latest*.

But it may be useful to observe the law which holds between the vowels of the four languages, the Greek commonly preferring an *a* before *σ τ θ ν*, the Latin *e* with a following *n*, the English *oo*, the German *u*: as, 1. *γαστερ- uenter- womb, mutter*;* 2. *μαθ-, mens, mood, muth or wuth*; 3. *παθ-νη, pen-us, food, futter*; 4. *ποδ- (with πατ-ος πατεω and S. pad-), ped-, foot, fuss*; 5. *γει-νς, γει-ειον 'a jaw' (with γαμ-φηλαι), menta, pl.† and gena, mouth, mund*; 6. *Φαν-ερ, hem-on- or hom-on, 'gloom,‡ Go. gum-a, O. N. gum-i*. To the same law exact obedience is paid by our present series *αγαθος, ben-, good, gut*. The adverb *well* has for its Go. and Sw. analogues *vaila* and *val*, for German in its three stages *wela* or *wola*, *wol* and *wohl*. But this very difference of vowel furnishes an argument for the connection with the forms signifying 'better' and 'best,' seeing that in the first place it is in Gothic and Swedish alone that we find an *a* in the adjectives, as Go. *bat-iza bat-ist-s*, in Sw. *battre bast*; and again the *uo* of *wola*, etc., was the more to be expected in a language which already in the positive *kuot* has the combination *uo*.

But if all this be right, we may conclude that *αγ* of *αγαθος* is the stem, *aθ* having at the outset the same power as *αλ* of *μεγαλ-η, όμ-αλος*, the *n* of *magnus*, and so on. This *αγ* I find again in *αγ-αυαι* 'I make good to myself, good in my own eyes, I admire.' Cf. for this power, as belonging to a reflective verb, *miror, dignor*,

* It should be remembered that *womb* meant originally 'the belly' generally, and not merely the 'uterus' as now. Indeed a Scotchman still talks of 'kicking a boy in the womb.' Again the G. *mutter* sometimes means 'mother' (*mater*) and sometimes 'womb,' as in the compounds *Mutter-bruch-, -krebs, -scheide, -sucht*, and *Aufstossung der Mutter* 'rising of the mother,' as the Scotch say, *i. e.* hysterics. So we read in Lear: "Oh how this mother swells up toward my heart, *Hysterica passio*! Down, thou climbing sorrow!"—where however the poet seems to forget the sex of the speaker.

† See Essays, p. 197, where it is contended that *mentum* in the singular was originally a 'jaw,' and so *menta* pl. the 'two jaws or mouth.'

‡ This refers to the usual assumption that *bride-groom* is a blunder for *bride-gloom*, corresponding to the G. *bräuti-gam*.

miseror, glorior. So too I look upon *αγ-āv* as a comp., corresponding in suffix to *περ-āv*, for I cannot see how these forms are to be explained as accusatives of *αγῆ* and *περα*, whereas in both the notion of a comparative is felt. Lastly I claim *αγανος* 'mild,' as a simple variety of *αγαθος*, for it is no way uncommon (cf. p. 19 above, and Essays, p. 184), when a word takes two different shapes, for the meanings to become distinctly different; as for example our own *faction* and *fashion*, *ghost gust* and *yeast, gate* and *gait*, *gambol* and *gamble*, *older* and *elder*, *triumph* and *trump*. Lastly *αγνῶπ* I find is said to be derived from *αγαν*; but I can see no reason why it should not be formed from the simple stem *αγ*.

So far I have taken no notice of *απ-ιστος*, except to say that *απ* alone must contain the theme; and here it must be admitted I think that we have the same root as the S. *war* 'eximius' (Bopp's Gloss. Sanskr.); but this admission is not inconsistent with the proposition from which I started, seeing in the first place that a root *war* may well coexist with one in the form *gar*; and here we have what is almost one with the Lith. *géra* 'good.' Let us put the case then that *απιστος* may have supplanted *γαρ-ιστος*. I compare this with a root of precisely the same form, the Scotch verb *gar* 'make or do,' in O. N. and Swed. *göra*, Dan. *gjøre*. Now it is well known that this root occupies the very ground which in allied languages belongs to the vb. *do*; and I have long been of opinion that the two verbs are not merely one in power, but also one in origin. The L. *dare* is known to have had an older form with an *n* as seen in *dan-unt*; but it also had a *u*, as in *duim* and *induo*, as well as in the G. *thu-n*, and, if we let the ear guide us, in our own *do* and *done*. All this points as I have said before to a fuller *duano*. Now Suur in his 'Geschichte der Klöster Ostfrieslands' (Emden, 1838), as quoted by Kosegarten in Höfer's 'Zeitschrift' (1, 95), gives *duahn-en* for the form of the vb. 'to do' in the island Wanger-oge; and thus we are brought to a combination of letters almost the same as is seen in the old L. *duon-us*. Now between mutes and liquids there are marked affinities. As *m* has an affection so to say for *b*, so has *n* for *d*, and *r* for *g*; and

accordingly, when the two words before us, *duon-us* and *duahn-en*, exchange the *d* for *g*, as before a *u* consonans they are likely to do, then with this change comes the other of *n* to *r*, so that we arrive at a verb *gar* 'do' on the one side and an adjectival stem *gar* 'good' on the other, corresponding to the Lith. *géra*-. Lastly this very form constitutes the root of *αρ-εσκω* 'seem good to,' 'please,' of *αρετη*, and possibly of the prefix *αρι* (*ερι*).

Malus, peior, pessimus ; *bad, evil* and *ill, worse, worst*.

The connection of *malus* and *bad* is I believe commonly admitted, the difference being explained by the love of the L. language for an *l* in place of a *d*, as seen in *Vlixes, lingua, lacruma, laurus* (= *δαφνη*), *ligo* (= *δεω*), and then with a change of one labial for another labial, *peior* may stand either for *pēd-iōr* or *pēl-iōr*, the vowel modified by 'umlaut,' while *pessimus* points by preference to an older *ped-simus*. But our English series give more difficulty, but this difficulty has already been discussed in the Essays (p. 136). Not to repeat all that is there said, I will state only the leading points of the argument. First it is assumed that *am-alus* was an older form of the L. *malus*, corresponding in suffix to *μεγ-αλη, ὀμ-αλος, ἀπ-αλος, χαμ-αλος*; and the assumed *am-alus* accounts for the Prov. *avol*, a word which once belonged to the old Catal. Span. and Port. With this again we must connect our E. *ev-il*, and G. *üb-el*, in which the weak vowel of the suffix has led to a weakening of the root-vowel. Then again in *am*, as the root-syllable of *am-alus*, I recognize the prefix *am* in the sense of 'male' which is the Umbrian and Oscan representative of the so-called 'av (a) privative' preserved in the geographical term *Am-sanctus*, i.e. 'consecrated to evil,' and so suited for a district of deadly vapours. This *am* is of course one with the prefix of *im-pius, in-utilis*, etc. But again there is reason for believing that this root had at times an initial digamma; as in the Dutch *wan-gunst* 'miss-gunst,' *wan-smaak* 'übel-geschmack,' *wan-trouwen* 'miss-trauen, wan-hoop' 'verzweiflung,' and so in old English, *wan-hope, wan-trust, wanton* for *wan-towen* * = *un-gezogen*. Assuming then an archaic Lat. *uam-alus* as older

* A derivation which I borrow from Mr. Wedgwood.

than *amalus*, we must expect in English a *v* as the representative of the L. *m*, just as in *evil*; and so, first discarding the suffix *alus* in obedience to what has been just said (p. 269), we come to a theoretic comparative *wav-er*, so like our provincial *waur* ‘worse,’ from which by hypertrophy, as we have called it, we are brought to our actual forms *wor-se* and *wor-st*. There remains *ill*, which is but an abbreviation of *evil*; and here again we have a parallel corruption in the Provençal *aul* for *avol*.

CHAPTER XXII.

NUMERALS.

ON the origin of the first four numerals, though much has been written and that by writers of ability, no results that seem to me satisfactory have been produced. A connection between the *S. panchan* and the *n. pani* 'hand' is probable, seeing that our decimal system of notation is beyond all doubt founded upon the number of fingers, which afford the simplest symbols of number, and as such are to this day habitually used, as for example by the conductor of one omnibus telegraphing to the conductor of another omnibus the number of his passengers at any moment. Nay as the fingers supply an ever-ready notation for the early numbers, it seems not unlikely that for a time man, while yet uncultivated, was satisfied with this simple method of denoting such ideas; and this the more as any mode of effecting the same object by oral signs was as difficult to find then, as it is difficult to conceive now. Exactly in the same way the name for 'ten' bears the strongest resemblance to the word signifying fingers. Thus *decem* has I think evidently in its root-syllable *dec*, the same as that of *dico* (*deico*) and *δεικνυμι* 'to point, to shew,' and, what is substantially the same, *δακ* of *διδασκω*, *διδάξω*, and *δακτυλος*, and *doc* of *doceo*, as also *dig* of the Latin *digitus*, and probably *δεχ* of *δεχομαι* 'take.' The German exhibits the likeness still more distinctly in its *zehe* 'toe,' *zehen* 'toes,' the latter of which is identical with *zehen* 'ten.' That *zehe* originally meant 'finger' as well as 'toe,' though now supplanted in this sense by *fing-er* from *fang-en* 'to take,' is sufficiently clear from the fact that its Latin analogue *digitus* includes the two ideas. This view is confirmed by the fact that in Greenland after counting the first five on one hand, the next

five are counted on the other hand; then the toes on one foot are called in requisition, then those on the other. Lastly for twenty the name is 'a man,' and so on till '5 men' denote '100' (Pott's 'Quinary System,' pp. 2, 3).

In the formation of numerals the doctrine is specially true that "C'est le premier pas qui coûte." As soon as we have names for the numerals 1, 2, 3, 4, 5, all that follows may well be the result of combination. Already the Latin *quattuor* and *quater* have been deduced somewhat violently by some from *que* and *ter*, the base of *tr-es* and *ter-ni*, and itself an adverb with the meaning of 'thrice.' But if this be not accepted, it has been placed beyond doubt in Pott's work, entitled the 'Quinary System,' that in some African, Asiatic, and American languages the numerals which immediately follow 'five' have been so built up. Thus (p. 32) the Yaloff numerals on the authority of Park are: 1 *wean*, 2 *yar*, 3 *yat*, 4 *yanet*, 5 *judom*, and then 6 *judom-wean*, 7 *judom-yar*, 8 *judom-yat*, 9 *judom-yanet*; but 10 *fook*. Other examples from Africa are given by the same author in pp. 31-49; from Asia in pp. 50-60; from America in pp. 60-74. The most marked of these is in a language of Sydney (p. 46), viz.: 1 *ouagle*, 2 *bola*, 3 *brouï*, 4 *karga*, 5 *blaouré*, with 6 *blaouré-ouagle*, 7 *blaouré-bola*, 8 *blaouré-brouï*, 9 *blaouré-karga* (Fr. orthog.).

Again when we approach the next station, so to say, of 'ten,' we find subtraction called in aid. Thus in the Tatar family the Aino or Kurile language, in the extreme east of Mongolia, has: *syknap* for 1, *dupk* 2, and *upyks* 10, whence are evidently deduced *duhpuks* 8 (2 from 10) and *syknüpyks* 9 (1 from 10) (see Ritter v. Xylander, 'Sprachgeschlecht der Titaner,' pp. 445, 446). So the corresponding Lapp numerals are *ack-t* 1, *gweck-t* 2, *tzecke* 10, with *kaektze* 8, *åktze* 9, (Fiellström Gr. Lapp. p. 29). In Pott's work other examples will be found, including one (p. 46) where 7 is expressed by the subtraction of 3, viz. a language called Yap, the names for 1, 2, 3 being *rep*, *ru*, *thalep* (Germ. orthog.), and for 7, 8, 9 *me-delip*, *me-ruk*, *me-rep*, *me* denoting 'from.' And we have in fact the same system of subtraction in the Roman symbols *iix*=8, *ix*=9, and so on; and this carried on from *duodeviginti*

18, *undeiginti* 19, up to *duodecentum* 98, *undecentum* 99. With this corresponds the Greek variety, such as ἑνός δεοντος (or δεοντες) πεντηκοντα, δυνον δεοντων π., and so on; as well as an old English form, "forty stripes save one." Hence when I have before me the forms for 9, Gr. *εννεα*, L. *nouem*, S. *navan*, and O. Slav. *dewyni*, I am led to assume for the Gr. numeral an older form ~~from~~ *εννεφαν*. Secondly I call to mind that the combination *nn* often interchanges with *nd*, so that *εννεφαν* might well have coexisted with *ενδεφαν*. But the Lat. *in*, Gr. *εν*, had for its original sense 'down,' and from this stem came secondary forms *endo-*, *indu-*, *inde* 'down' (as in *iam inde a puero*), and eventually by decapitation *de* 'down.' Hence it seems clear that the Sl. *de-wyni* is formed from *wyni*, meaning 'one' (cf. Lith. *wiena-s* 'one') by prefixing a preposition of want or removal; in fact precisely as the Latin has *de-unx* = $\frac{1}{2}$, *dextans* for *de-sextans* = $\frac{1}{2}$, *dodrans* for *de-quadrans* = $\frac{3}{4}$. So too the assumed *ενδεφαν* is made up of the same elements as *de-wyni*. Possibly *octo* may have superseded a fuller *doc-to*. As the S. prep. *ni* (= *εν*) uniting the two ideas of 'down' and 'in' only appears in the decapitated form, so Lithuanian, a language which has the closest affinities with the classical languages, has *nu* 'down' (cf. *νεν-ω*, *nu-o*), of which the fuller form was *nug*. Thus as the S. *ni* corresponds to the Latin *de*, so to Lith. *nug* would fairly correspond a Latin form *doc* (cf. also the Gr. *δν-ω*, which means alike 'go in,' 'enter,' and 'go down,' 'set,' as the sun). The Gr. *νυχ* and *νκ* of *νυχα νυχιος νυκτ-ος*: and *noc* of the Lat. *nox noct-is* must also have signified 'down,' and so 'sun-down,' just as the Norse *nid*, literally 'down' (E. *neath*), was used of the time when there was no visible moon (Essays, p. 68). The loss of an initial *d*, thus assumed for *octo*, though rare, is not unknown, as for instance in the L. *ros*, compared with *δρσο-ος* and *έρση εέρση*, in *uiginti* as standing for *duiginti*. So too the G. prefix *er*, akin to L. *re*, seems once to have had an initial *d* (see Essays, p. 85). In proposing this theory about *octo* I feel its boldness, and so only put it forward as a possible truth; but it seems to meet one difficulty, that the Sanskrit *aktau* is declined as a dual.

The word *eleven* is the subject of controversy. The first

portion indeed is on all hands admitted to contain some representative of the word *one*, as indeed is clearly seen in the Go. *din-lif*, in the Gr. *έν-δεκα*, and L. *un-decim*. But the *leven* in Mr. Wedgwood's view is simply a perfect participle of the E. vb. *leave*; and *eleven* = *one left* (over). Logically there can be little objection to such an etymology; but when we find a *d* and an *l* habitually interchanging, and this too in the very numeral that is now before us, S. *daça*, also *laça*, Lapp *tzecke*, also *lücke* (Fiellström, p. 30), and Lith. *wieno-lika*, *duy-lika*, *try-lika*, compared with the Gr. *έν-δεκα δω-δεκα*, we may venture without the slightest hesitation to assert that our *leven* (*lve* of *twelve*) is but a variety of L. *decem*. The change of a guttural (*c*) to a *v* is familiar to the two languages, as in *linquo leave*, *aquus* (*accus*) *ev-en*; and further it also accords with the habit of our own language to substitute an *l* for a *d*, as in *Aegidius*, *St. Giles*, *Cardeoil*, an old form of what is now *Carlisle*.

I pass to the multiples of ten; and here I first notice, that, whilst the Greek and Latin give a general preference to a final *ta* (*ta*), the word for *twenty* in both languages has the variety *ti*, *εικατι* and *uiginti*, thus all but coinciding with our habit, *twen-ty*, *thir-ty*. . . *nine-ty*. The S. and Zend agree here with the Latin, Greek, and English, having the forms *vinçati*, *vîçaiti*. So again the form *ti* reappears in the S. and probably the Z. forms from 60 to 90 both included, while for the intermediate 30, 40, 50, the Zend again has *ta* and the S. drops the vowel altogether. In the Teutonic family we find after the vowel a guttural, so that in place of *ta* or *ti* the Go. has *-zuc*, the G. *-zig* (*sig*), the A. S. *-tig*. Hence we may safely assume that we have here, what the sense requires, an abbreviation of a word corresponding to the Gr. *δεκ-α*, Lat. *dec-em*, G. *zeh-en*.

Then as regards our own *thirty*, *forty*. . . *ninety* there is no difficulty in understanding the first portion; and to be consistent we ought to have said *two-ty* rather than *twen-ty*. In the Latin *uiginti* it has been long seen that an initial *d* has vanished, and this before what is virtually a *w*, was not very strange. But whence the *gin* of *viginti*, *triginta*, the *en* of *twenty*, the *agin* of *quadr-agin-ta*, etc., the *akov* of *τρι-akov-τα*, etc.? For

twenty a solution presents itself in the O. G. *zuéné*, the A. Sax. *twegen*, and our own *twain twin*, all of them secondary and probably diminutival forms of *zuo*, *twa*, *two*. Diminutival substantives from numerals seem to be common in all languages. Thus the Latin has the series *unio*, *duplio*, *trio* and *ternio*, *quaternio*, *quinio*, *senio*; and for calling masc. words in *ion* diminutives we have the authority of Priscian (3, 618) speaking of *senecio*, and of Festus speaking of *matellio*. Then in Greek we have a similar series, *μνας*, *δνας*, *τριας*, *τετρας*, *πεντας*, and *πεμπτας* or *πεμπτας*, *έξας*, *έβδομας*, *ογδοας*, *εννεας*, *δεκας*, *ένδεκας*, etc. The Italian has its *duetto*, *terzetto*, etc., we have our *triplet* as well as the *twain* and *twin* already mentioned; and lastly in French we have a series of masc. nouns, *quatrain*, *sixain*, *dizain*; and of feminines, *dizaine*, *quatorzaine*, *vingtaine*, *trentaine*, *cinquantaîne*, *centaine*.

To trace such words up to their Latin origin I follow the analogy of the botanical term *plantain*, which has been contracted from a Latin *plant-ago plant-agin-is*, formed from *planta* precisely as *ferulago* from *ferula*. Thus the Latin must once have had, possibly in lower life alone, possibly only in a dialect or dialects, such nouns as *triago*, *quadrado*, etc., with a notion of 'a packet of three, four,' etc. Thus ^{Here} *ag-on*, *ακ-on*, is a double suffix; and indeed a mere *ακ* is seen in *τρι-ακ-is*, *τετρ-ακ-is*, etc., when compared with *δ-is* for *δυ-is*, *τρ-is*; and even *άπαξ* is no doubt abbreviated from *άπ-ακ-is*. I conclude then that *quadr-agina*, etc., is made up of *quadr-agon-*, a dim. of *quattuor*, and *ta*; and similarly *τεσσαρακοντα* of *τεσσαρ-ακον-*, a dim. of *τεσσαρ-ες*, with the same *τα*; and again that this *ta* stands for *tan* or *ten*, an abbreviation of *decem*, *δεκα(v)*. Lastly in the multiples of a hundred, as *quadr-in-genti*, *oct-in-genti*, etc., *in* may well be a compression of a similar *agin*.

The formation of the name for a hundred is unmistakable in the Go. *taihun-tehund*; where, by the way, the same simple principle holds as in the formation of our *thirty*, *forty*, etc.; and almost equally in the O. G. *zehan-zuc*. But the idea of hundred is one frequently called for, and consequently so long a name was objectionable; and this the more for the multiples of a *hundred*, 200, etc. It was therefore to be expected that some

abbreviation should take place, and accordingly in Gothic, by a double removal at once of head and tail, a short form, *hunda* or *hund*, came into common use, so that *trai hunda* was used for 200, and so on. So in A.-Saxon the form *hund* was used for 100, as *scipa án hund and eahtatig*, Ships 180. Then from this numeral was derived a substantive, as G. *hund-ert*, E. *hund-red*, the latter of which may be compared with the sb. *hat-red* from the vb. *hate*. In several languages of the Indo-European family the last part of the word has what corresponds to our short *ten*, itself apparently cut down from a lost *tehen*, first reduced to *teen* (as *thir-teen*, etc.). Cf. the double form in German, *zehn* and *zehn*. To our E. *ten* duly corresponds (so far as *en* is concerned) a Latin *tum* (cf. *then* = *tum*); and then by decapitation *decen-tum* is cut down to *centum*. *Tov* is the form a Greek would prefer, and so *δεκα-τον* is beheaded and gives with slight variation a form *ἐκατον*. *Κατον* indeed would have corresponded more precisely to a Latin *centum*; and it is very possible that the syllable *ἐ* of *ἐκατον* may be, as some hold, a corruption of *έν* 'one.' On the other hand, the form *ἐκατοντα*, seen in several compounds, must have originated in a lost *ἐκακοντα*, corresponding to *τριακοντα*, the change of *κ* to *τ* being due to the desire of avoiding a repeated guttural. A form *ta* meets with favour in S., and accordingly *dasa-ta* leads to a shortened *sata*; the very form by the way which still exists in the Finn language. And then in Lithuanian—but here I must stop for a little anecdote. More than forty years ago I made the acquaintance of a German friend named Wittich, the chief contributor of geographical articles to the Penny Cyclopaedia; and I learned from him that born near Tilsit he spoke as a child Lithuanian, knowing then nothing of German. Finding that he still retained a knowledge of this language, which for me had great interest, I asked him to supply me with what for philology would be useful; and having already then arrived at the theory about this formation of words signifying 'a hundred,' I especially asked him to give me the numerals. Accordingly he wrote down the words for 1, 2, 3, etc., 20, 30, and so on; but just as he was coming to the number which had the chief interest for me, he suddenly paused, and at

last put down his pen with the remark, "I have quite forgotten the word for a hundred." Thus baulked I did not however despair, but taking up his list I selected his word for 'ten,' viz. *deszimpti*, and finding from his list that the vowel *i* was a favourite in the language, I asked him if the name for a hundred was anything like *szimpti*; when with something of a start he said "*szimpti* is the very word, but how on earth came you to know it?" All this I gave in a public lecture at one of the College soirées in 1831.

But here I must admit that I have never arrived at any solution of the problem why, in A.-Saxon, *hund* is commonly placed before the multiples of 'ten' after 'sixty'; but at the same time I must object to Rask's doctrine (p. 64, § 176) that we have in this *hund* what "answers to the Gr. *-κορτα*, Lat. *-ginta*."

In the Go. *thūsundi*, O. G. *dusunt*, N. *thusund*, A.-S. *thusend*, E. *thousand*, O. Sl. *tysutchá*, we have no doubt in the *s* and what follows it an equivalent of the L. *centum*, G. *hund*, the *s* having superseded the guttural; but the *h* has been retained in the Finn *tu-hat*, compared with Finn *sata* '100.' On the other hand, the first element in the same words is no doubt a shortened form of some analogue of our *ten*. Before an *s* an *n* would naturally vanish.

The Gr. *μυριος* was confessedly in origin a vague term for the measureless; and the Lat. *mille*, by its form, seems to claim kindred with it; and if this be true our *million* must go with it. Nay, *χλιοι* also, for this stands to *mille* much as *κελας*, implied in *κελαινεφης* and *κελαινος*, to *μελας*. These high numbers were little needed in the early stages of a nation's life, and so often pass as loan-words from one country to another. But the simple numbers are always native; and so a connection in any two languages between these is one of the strongest proofs of affinity. At the same time words often change, so that the likeness becomes all but lost. Thus the Greek *τεσσαρ-ες*, L. *quatuor*, and our *four*, have little in common beyond the final liquid. But the Aeolic variety *πινυρες* has, in its initial consonant, the usual analogue of a L. *q*; and again the middle consonants of *τετταρ-ες* are identical with those of the L. *quattuor*, which co-

exists with *quatuor*. Then again the π of $\pi\sigma\upsilon\pi\epsilon\varsigma$ is habitually represented by an E. *f*. Lastly, the Go. *fidvôr* and A.-Sax. *fewer*, while they correspond, at any rate in the last letters, with the L. *quatuor* and S. *chatvâr*, *chatur*, show us how the contracted G. *vier* and E. *four* have been deduced. Here we have seen how a Gr. π , L. *q*, and E. *f*, correspond. The same relation exists in a twofold degree between Gr. $\pi\epsilon\mu\pi\epsilon$, L. *quinque*, Go. *fimf*, A.-S. *fif*, E. *five*. Compare too the verb $\pi\iota\text{--}\pi(\epsilon)\tau\text{--}\omega$, L. *cad-o* (with *cal* of *calamitas*, also written *kadamitas* ‘a blight as falling from the stars’), E. *fall* (cf. $\sigma\phi\alpha\lambda\lambda\omega$ and L. *fallo* ‘cause to fall,’ ‘trip up’). Again the L. adverb *bis* has no letter in common with *duo*; and yet no doubt represents a lost *du-is* (= $\delta\iota\varsigma$ and *twice*), the change being the very same which is known to have befallen *bonus* = *duonus*, *bellum* = *duellum*. So too the Go. adj. m. *bai*, f. *bos*, n. *ba* ‘both,’ together with the very word *both*, have undergone a similar contraction.

Of all words numerals are most subject to compression; and this probably because in the process of counting it is convenient that every step should occupy the same time in utterance. Hence probably our abbreviation of *fidvor* to *four*, and hence *seven* is apt to be pronounced as a monosyllable, as indeed *heaven* also. Nay in *sen-night* we have a monosyllabic form; and the despised Bill *Snooks* seems to represent what is grand enough for any one, William of *Sevenoaks*. Such abbreviation is well seen in the Hindostani series: *ék* 1, *dó* 2, *tín* 3, *chár* 4, *páñch* 5, *cha* 6, *sát* 7, *áth* 8, *nau* 9, *das* 10; especially if compared with the parent forms of the Sanskrit. But words which appear as of many syllables to the eye are often shorter for the ear. Thus the forms in Latin which begin with *quadr* seem often in the language of the drama to invite a shortened pronunciation, as “*Iunít lucrisque quádruplicauit rém meam*,” Pl. St. 3, 1, 4; “*Qui mísere male mulcábere quadringéntis Philippis áureis*” (pr. *Philippis* or *Philpis* here as always in Plautus), Bac. 4, 9, 10; Add 4, 9, 50, 5, 2, 64; and Rud. 5, 2, 37; “*Quam égo pecuniám iam quadрупicem áps te et lenone áuferam*” (where I have *de meo* inserted *iam*, in preference to Fleckeisen’s insertion of *ab* before *lenone*), Cure. 5, 2, 21: and *quádrilíbrem*, Pl. Aul. 5, 2; *quádrupedem*,

Ter. Andr. 5, 2, 24; and *quádrupedis*, etc., Naev. 30 r; Enn. 156; Acc. 315, 381, 603; *quádriugo*, Enn. 92.* Indeed I have long contended that in the Latin language (may I add the Greek too?) a word containing two or more consecutive short syllables, exclusive of the final syllable, was commonly pronounced with a suppression of the second vowel, so that for *fám(i)liáris*, *mís(e)ria*, *confíc(e)re*, the vowel included within brackets was all but dropt in pronunciation, and the accents fell as here marked; and again that if the vowel so condemned was an *i* or *u*, followed immediately by a vowel, these respectively passed into the so-called *i consonans* and *u consonans*; so that *mulieris*, *redierit*, *contribuere*, were pronounced as *múl-yeris*, *rédi-yerit*, *contríb-were*, again with accents as marked. Such pronunciation I believe to have been in ordinary use; and without it the iambic and trochaic metres of the Latin drama seem devoid of all rhythm. But the same holds good of the Epodes of Horace, nay for the dactylic metre of Vergil in *ariete*, *abiete*, *stëlio* (for so the MSS., not *stellio*), *fluuiorum*. A further proof of the doctrine is seen in the written forms of *repperi*, *reppuli*, *rettuli*, *rettudi*, *reccidi*, which evidently grew out of reduplicate perfects *re-peperi*, etc.; and in the same way *publicus*, or rather *poplicus*, is only a compressed variety of *pöpülicus*. Applying this theory to the forms *quadruplicauit*, etc., I claim a shortened pronunciation, such as *carplicauit*. Ritschl felt the difficulty in the case of *quadringenti*, and so would substitute *quadrigenti* with the support of an inferior MS.; and this in three passages. But *carngenti* was also pronounceable. This theory as to the pronunciation of *quadru-* finds, as I said above, strong support in the form of *quartus*, for here too a *d* has been lost, while the Gr. *τεταρος* has preserved the corresponding dental.

Again, although the Latin language in its ultimate form could express the idea of 'one' only by a disyllabic word (*un-us*), yet at one time a simpler form *un*, as now in French, and corresponding to Greek *έν-* (*έν-*), our own *one* or *an* (Sc. *ane*) must have existed, for only from such a form could a genitive *un-ius* have been de-

* See p. 132 for other passages of like nature.

duced; whereas from *un-o-*, strictly a dim. of *un*, there naturally comes a gen. *uno-ius*, which passed through a form *un-oi-us* to *unius*. So too a short *do* or *du* for *duo* accords with the Gr. δω-δεκα and the Lat. *du-plex*. Then *ter* in *terni*, *quin* in *quintus* and *quindecim*, *no* in *nonus*, *de* in *deni* (for *deceni*), give us monosyllabic forms for the several numerals, 3, 5, 9, and 10; so that it seems no rash supposition that a Roman in rapid counting used short forms like *un*, *do*, *ter*, *quar*, *quin*, *sex*, *set* (?) *ot* (?), *no*, *de*, in which the loss of the *c* seems to be confirmed by the Gr. δημος, the 10th of a tribe, contracted from a lost form δεκομος corresponding to ἑβδομος and L. *decumus*. In writing the Romans had less occasion for abridgment of the numerals, as they then more commonly used the symbols made up of I V X L, etc.

So far the decimal notation alone has been discussed, but other bases are at times assumed. Thus a quinary system has prevailed in some countries; and this fact has led to an assumption, probably a false one, that some people have been so utterly barbarous, so confined in the field of thought, as to have had no notion of a number beyond five.

Again the counting by twelves has been not merely recommended by theorists, but actually adopted by ourselves to some extent, as when we count by dozens; and the system has certainly the limited advantage of twice halving so as to leave an integer. Hence we have our '12 ounces to the pound,' '12 drams to the ounce,' '12 inches to the foot'; and in like manner the Roman *as* was made up of 12 *unciae*. But the idea of now substituting a duodecimal notation universally has little chance of success, until a breed of six-fingered men has superseded existing races.

Akin to this is the astronomical scale for seconds and minutes of a degree, and the 360 degrees for a whole circle. The same tendency shows itself in the Roman use of *sescenti* in the same vague sense as our *thousand*.

There is also the practice of counting by scores, as when we speak of 'three score years,' 'four score years,' with the intermediate 'three score years and ten.' The same prevails above all in the Keltic family of languages, as: Gael. *da fichead*, i. e.

2×20 , for 40; *tri fichead*, etc.; and so for the odd multiples of ten, *deich ar fichead*, $10 + 20$; *deich is da fichead*, $10 + 2 \times 20$; Breton, *daou ugënt*, 2×20 ; *tri ugënt*, 3×20 ; with *dek ha tri-ugënt*, $10 + 3 \times 20$; *dek ha pevar-ugënt*, $10 + 4 \times 20$. No doubt too from this Breton habit come the Fr. *soixante-dix*, *quatre-vingt* and *quatre-vingt-dix*. In some quarters of both France and Belgium the word *septante* is at times heard.

On the subject of ordinal numbers there is little that calls for special remark beyond the fact that they bear a remarkable likeness to superlative forms, with the exception of the second in the series, where the likeness is to comparatives. The words *πρωτος* (for *προ-ατος*), *primus* (for *pro-imus*), *first*, are in fact absolute superlatives of the prepositions *προ*, *pro*, *for*; and the connection of the ideas is natural, seeing that an ordinal, say *seventh*, denotes the extreme one of seven. As *ατος* is the suffix of *μεσ-ατος*, so the same suffix is seen in *ενατος*, *δεκατος*, and abbreviated in *τριτος*, *τεταρτος*, *πεντητος*, *έκτος*; and a similar form prevails in the L. *quar-tus*, *quin(c)-tus*, *sex-tus*, as also in our own *fourth*, *fifth*, etc., a *th* as usual in English corresponding to a classical *t*, while in *thir-d* the irregularity is explained by the natural objection to having a second aspirate after the initial *th*, the same in fact which induced a Greek to avoid the forms *θριχ-ος* and *θαφρος*. Again in Latin *septimus* and *decimus* agree in suffix with *post-umus*; and the Greek follows the same formation in *εβδ-ομος*.

With the ordinal series the Latin adjectives *quotus* (for *quot-tus*) and *quot-umus* claim connection both in form and meaning, seeing that *quota hora est?* is a question to be answered by one of the ordinal series of numbers, *Sexta hora*, etc.; and similarly we find *Quótumas aedis dixerit, id ego ádmodum incertó scio* (Ps. 4, 2, 7): 'I am quite at a loss as to the number he gave me of the house—whether *sextae aedes*, No. 6, or what?' The translation given by several writers 'how many houses' is erroneous in itself, and makes utter nonsense of the passage.

I have said that the second of the ordinal series is a comparative. This is seen in *δευτερος*, L. *alter*, G. *ander*, E. *oth-er*, of which the Greek noun is self-explained; and of the rest I need say nothing here, as I have given at length in the eighth of my

Essays my argument that *alter* is substantially a comparative of *un* of *unus*, and our own *other* a comparative of *one*. In the same paper (p. 177) I have contended that $\acute{\epsilon}\tau\text{-}\epsilon\text{pos}$ is the Gr. analogue of *alter*, being deduced from $\acute{\epsilon}\nu\text{-}$ (n. $\epsilon\acute{\iota}\varsigma$); and to what is there said let me add the Umbrian *etre* of like origin and power, as occurring in *Kasclate*, *etre Kaselate*, *tertie Kaselate* (A. K. ii. p. 17; taf. ii. b. 6).

In fractions there is a general tendency to attach to them a dim. suffix: thus in German we find *dritt-el*, *viert-el*, *fünft-el*, etc.; in E. *thrid-ing*, whence by Re-vection, so to say, *North-riding* for *Nor-thriding* in Yorkshire; *farth-ing* used not merely for the fourth of a penny, but also for the same fraction of a ward in London (see p. 69); and *tith-ing* is a tolerably familiar word.

In mixed numbers, as they are called, that is, in those where to a whole number is added some simple fraction, a certain abbreviation is current in several languages by adding to the name of the fraction an ordinal exceeding by one the units of the integer, so that the existence of the preceding units is assumed without being expressed. Thus $\tau\text{ριτον ἡμιταλαντον}$ means strictly a third half-talent, but is used for $2\frac{1}{2}$ talents. So in Latin *triens tertius* = $2\frac{1}{3}$, *quartus quadrans* = $3\frac{1}{4}$, *lignum bes' alterum* 'a 20-inch batten'. On the same principle *sestertius*, compressed from *semis-tertius* = $2\frac{1}{2}$, and *sesquis* from *semis-sēquis* (*sequis* the lost pos. of an adj. from *sequor*, or rather, as I contend, itself a comparativel form compressed from *sequios*, like *potis*, *magis*, *satis*, *nimis*, from *potios*, etc.) = $1\frac{1}{2}$. Exactly in the same way the Germans have *anderhalb* = $1\frac{1}{2}$, *dritte-halb*, $2\frac{1}{2}$, etc. For the Frisian Richthofen (v. half) gives *otherhalve* and *oer-hal** = $1\frac{1}{2}$, *thredda half* $2\frac{1}{2}$, *fiarda half* or *fiarda hael* $3\frac{1}{2}$, *sexta hael* $5\frac{1}{2}$, up to 22 *hal grata* '21½ times as great.' Again the abbreviation seen in *anderhalb*, etc., is known in others of the Teutonic family, as the Norse and

* This form *hal* affords a clear proof that in our *hal-f* the last letter is a remnant of a diminutival suffix, which accords well with the idea of a fraction, and would equally suit the case of *cal-f* or *tur-f*, the simple *toor* or *ture*, is given by Jamieson; and *whar-f* may possibly be a dim. of a word = the Fr. *gare*; while *wol-f* (= *lupus*, or rather a theoretic *got-up-us*), has probably its root in *gut* 'yellow.'

A.-Saxon. Again the Lithuanian, from *puse* 'half,' has the forms *pus-antro* $1\frac{1}{2}$, *pus-treczo* $2\frac{1}{2}$, *pus-ketvirto* $3\frac{1}{2}$ (Schleicher's Gr. p. 297). So too in Hungarian by the side of the ordinal numbers *masodik* '2nd,' *harmadik* '3rd,' *negyedik* '4th,' *huszadik* '20th,' I find *mas-fél* ' $1\frac{1}{2}$,' *harmad-fél* ' $2\frac{1}{2}$,' *negyed-fél* ' $3\frac{1}{2}$,' *huszad-fél* ' $19\frac{1}{2}$ ' (Wékey's Gr. pp. 12, 14). But in Norse and Danish there is yet another, but similar, mode of applying this principle. In the former language, by the side of such an adjective as *þritug-r* '30 years old,' there stand *half-þritug-r*, i. e. *half the third* (decad) or '25 years old,' *half-fertug-r* '35,' etc.; while the Danes, counting by scores, use *halv-tred-s* for '50,' *halv-fjer-s* '70,' *halv-fem-s* '90.'

CHAPTER XXIII.

PERSONAL PRONOUNS.

IN dealing with the First Person Pronoun, if only for variety, I begin with the later and consequently shorter and more corrupt forms; and from them work my way up to those which are older, fuller, and more genuine. Now our own language exhibits this pronoun in a shape which has reached the minimum, the simple vowel *I*. But the A.-Saxon and Gothic add to this a guttural, in the form *ic* or *ik*, while the German has another variety of the guttural in the aspirated *ich*. A palatal *ch* is also well known in our provincial dialects, as witness the phrases *cham* for 'I am,' *chill* for 'I will,' in the south-west (S. Jennings's Glossary, v. *utches*). Thus Edgar, in *King Lear* (4, 7), adopting the Somersetshire dialect says, "*Ch'll* not let go zer:" "*ch'ud* ha' been zwagger'd out of my life;" "*Ch'll* be plain with you." Yet another letter turns up in the classical *ego*, *εγω*;* and the Italian *io* has preserved the final vowel but with the utter loss of the guttural; and this loss again is seen in the Boeotic *ίωv*, *ίωv-γα*. But here we have two new elements, an aspirate at the commencement and a final nasal. The latter is also found in *εγων*, and slightly modified in the S. *aham*, Zend *azēm*; and lastly two more letters appear in S. *asmat*, the traditional crude form of the pronoun, in L. *egomet*, and virtually in the Gr. plur. *ἡμεῖς*, *ἡμῶν*, etc., for these are best explained as coming through the Ionic *ἡμεες*, *ἡμεων*, etc., from an older *ἡμετ-ες*, *ἡμετ-ων*, etc., especially as the adj. *ἡμετ-ερος* has preserved the τ.

* Bopp (§ 326, note in p. 103) draws attention to the interesting fact that a similar form for this pronoun is seen in Southern Asia and the adjoining seas, as Malay *aku*, Javan *aku*, Tagal. *aco*, Malagash *ahau*.

A possessive pronoun is always deduced from the gen. of the simple pronoun. Hence, as the old Latin of the consonant declension ended in *er-um*, e. g. *lapid-erum*, where the suffix *er-um* has in the *er* what represents the *is* of the sing. gen. *lapid-is*, and in *um* the symbol of plurality; so in Greek there probably once existed a pl. gen. ἡμετ-ερ-ων, or something like it, which forced to undergo the process of declension, would of course take the very form ἡμετερος. Precisely in the same way the gen. pl. *nost(e)rum* led to an adj. *noster*. The ἡμ of ἡμεις, etc., may well have grown out of an older ἐγμ (or, if it be preferred, ἄσμ, like the Sanskrit). In the same way the noun σημα seems to have superseded a former σεγμα, which would stand to δεκ of δεικνυμι, much as *sig* of *signum* to *dec* of the L. *dico* (*deico*), the representative of the Gr. verb just given. In this way σημα, *signum*, G. *zeichen*, and our *token*, are all of one stock.

I go back to *εγω* to note Bopp's remark that he should deem *εγον* a more reasonable form (§ 326, p. 103), so that *εγω* should owe its long vowel to the principle of compensation for the loss of the *n*. Probably the just explanation is, that already in *εγω* the *v* was silent. In the same way, in my view, ῥωννυμι, στρωννυμι are, as I have already said, for the ear no more than ῥωνυμι, στρωνυμι, superseding older forms, ῥοννυμι, στροννυμι. A silent *n* (cf. p. 135) was also familiar in Latin, especially before *s* and *f*, as Cicero implies when he writes, "*indoctus dicimus breui forma litera, insanus producta, inhumanus breui; infelix longa*" (Cic. Or. 159). At any rate a theoretic *εγον* would agree better with S. *aham* and Zend *azēm*.

But for the more trustworthy examination of the personal pronouns, we ought to have the declension before us as it stands in the leading members of the Indo-European family. Accordingly I set down the following, taking the Sanskrit, Zend, and O. Slavic forms from Bopp's work, the Lithuanian from Schleicher (p. 216), the O. Prussian from Nesselmann, the Ossetic from Rosen, the Gothic from Massmann, to which I think it right to add the Lapp from Rask.

FIRST PERSON PRONOUN.

SANSKRIT. *N.* aham [asmi]; *A.* mām, mā; *I.* mayā; *D.* mahyam, mē; *Ab.* mat; *G.* mama, mē; *L.* mayi. | *Dual N.* āvām; *A.* āvām, nāu; *I.* āvābhyām; *D.* āvābhyām, nāu; *Ab.* āvābhyām; *G.* āvayōs, nāu; *L.* āvayōs. || *Pl.* vayam, asmē (Ved.); *A.* asmān, nas; *I.* asmābhis; *D.* asmabhyam, nas; *Ab.* asmat; *G.* asmakam, nas; *L.* asmāsu.

ZEND. *N.* ašēm; *A.* maīm, mā; *D.* maibyā, mē, mōi; *Ab.* maḍ; *G.* mana, mē, mōi. | *Pl. N.* vaēm; *Ac.* nō, ne; *D.* maibyō, nō, ne; *G.* ahmākēm.

LITH. *N.* asz, esz; *A.* mănē; *I.* manimì, manim; *D.* mán, má, manej; *G.* manés; *L.* manyjē, maný. || *Pl. N.* mės; *A.* mūs; *I.* mūmīs; *D.* mūmus, mūms; *G.* mūsū, munsu; *L.* mūsyjē, musy. | *Dual N. A.* vedu, mudu; *D. I.* mumdvēm, mūdvēm, mūm; *G.* mūmadvēju, mūdvēju, mūdvēs, mūma.

O. SLAV. *N.* ašŭ; *A.* mañ; *I.* mŭnojuñ; *D.* mŭnē; *G.* mene; *L.* mŭnē. | *Dual N.* vê; *A.* na; *I.* nama; *D.* nama; *G.* naju; *L.* naju. || *N.* mŭ; *A.* nŭ; *I.* namì; *D.* namŭ; *G.* nasŭ; *L.* nasŭ.

O. PRUS. *N.* as; *A.* mien; *G.* maisēi; *D.* mennei, maīm. | *Pl. N.* mes; *Ac.* mans; *G.* nouson; *D.* noumans, noumas.

OSSET. *N.* az; *A.* man; *I. Ab.* manéi; *D.* manan; *G. L.* mani. || *Pl. N. A.* mach; *I. Ab.* machei; *D.* machén; *G. L.* machi.

GOth. *N.* ik; *A.* mik; *D.* mis; *G.* meina. | *Dual N.* vit; *A. D.* ugkis, ugk; *G.* ugkara (?) || *Pl. N.* veis; *A. D.* unsis, uns; *G.* unsara.

LAPP. *N.* mon; *G.* mò, etc. | *Dual N.* moj; *G.* modno, etc. || *Pl. N.* mí; *G.* mín, etc.

SECOND PERSON PRONOUN.

SANSKRIT. *N.* tvam; *A.* tvām, tvā; *I.* tvayā; *D.* tubhyam, tē, tvē (Ved.); *Ab.* tvat; *G.* tava, tē; *L.* tvayi. | *Dual N.* yuvām; *A.* yuvām, vām; *I.* yuvābhyām; *D.* yuvābhyām, vām; *Ab.* yuvābhyām; *G.* yuvayōs, vām; *L.* yuvayōs. || *Pl. N.* yúyam, yushmō

(Ved.); *A.* yushmân, vas; *I.* yushmâbhis; *D.* yushmabhyam, vas; *Ab.* yushmat; *G.* yushmâkam, vas; *L.* yushmâsu.

ZEND. *N.* tûm; *A.* thwaîm, thwâ; *D.* thwôi, tôi, tê; *Ab.* thwađ; *G.* thwahyâ, tava, thwôi, tôi; *L.* thwahmî. | *Dual* *A. D. G.* vâo. || *Pl. N.* yûshêm, yûs; *A.* vô, ve; *D.* yusmaiîbya, vô, ve; *Ab.* yûsmađ; *G.* yûsmâkêm, vô, ve.

LITH. *N.* tu; *A.* tăvê; *I.* tavimi, tavim; *D.* tav; *G.* tavês; *L.* tavyjê, tavý. | *Dual N. A.* jûdu (*f.* jûdvi); *D. I.* jûmdvêm, jûdvêm, jûm; *G.* jûmadvēju, jûdvēju, jûdvës, jûna. || *Pl. N.* jús; *A.* jûs; *D.* jûnus, jûns; *I.* jumis; *G.* junsu, júsû; *L.* jûsijê, júsý.

O. SLAV. *N.* tû; *A.* tañ; *I.* tobojuñ; *D.* tebê; *G.* tebe; *L.* tebê. | *Dual N. A.* va; *I.* vama; *D.* vama; *G.* vajû; *L.* vaju. || *Pl. N. A.* vû; *I.* vami; *D.* vamû; *G. L.* vâsû.

O. PRUS. *N.* tou, tu; *A.* tien, tin; *G.* twaise; *D.* tebbei, tebbe. || *Pl. N.* ioûs; *A.* wans; *G.* iouson; *D.* ioumans, ioumas.

OSSET. *N.* di; *A.* daw; *Ab.* dawéi; *D.* dawon; *G. L.* dawî, dachi. || *N. A.* simach; *I. Ab.* simachéi; *D.* simachén; *G. L.* simachi.

GOTH. *N.* thu; *A.* thuk; *D.* thus; *G.* theina. | *Dual A.* ïgkvis; *D.* ïgkvis; *G.* ïgkvara. || *Pl. N.* jus; *A.* ïzvis; *D.* ïzvis; *G.* ïzvara.

LAPP. *N.* don; *G.* dú | *Dual N.* doj; *G.* dodno. | *Pl. N.* dí; *G.* dín.

REFLECTIVE PRONOUN.

SANSKRIT. svayam, undeclined; with sva declined = meus, tuus, suus, noster, vester.

PRAKRIT. *D. G.* sê.

ZEND. *D. G.* hê, hôi.

LITH. *A.* sãvê; *I.* savimî, savim; *D.* sáv; *G.* savês; *L.* savyjê, savý.

O. SLAV. *A.* sañ; *I.* sobojuñ; *D.* sebê; *G.* sebe; *L.* sebê.

O. PRUS. *A.* sien, sin; *D.* sebbei; with swais 'suus' declined.

GOTH. *A.* sik; *D.* sis; *G.* seina.

Here the changes are so many and at first sight so violent,

that philologers have very commonly been led to the assumption, that the declensions have been made up by a conglomeration of independent pronouns. Thus Bopp (V. G. § 326) says: "In all the sister dialects of the great Indo-European language the nom. sing. of the pron. of the 1st p. is from a different base from that of the oblique cases"; and again (§ 331) "the plural of the same pronoun is in most of the same dialects distinct in base from the singular." This doctrine however of complementary roots I believe to be generally founded in error, and I have already at some length dealt with alleged cases of complementary verbs and complementary adjectives. Hence after much reflection I have come to the conclusion that in the case of the personal pronouns also it is altogether a mistake, although plausible enough, when we take a first look at forms so dissimilar as our own, *I me we us*; and the Lat. *ego me nos*, or again *tu* and *uos*, the Gr. *εγω* and *ὑμεῖς*, etc.

In the more formal discussion of this problem I start from the nominative of the first person pronoun. Now the G. *ich* and ac. *mich* have certainly a strong family likeness, but we are told that this is altogether deceitful, seeing that the final letters *ch* of the ac. belong to the case-ending, as shown by the ac. of the other pronouns, *dich* = 'te,' *sich* = 'se;' and the same holds for the Gothic, n. *ih*, ac. *mik*, the latter corresponding to *thuk* and *sik* as acc. of the other pronouns. But an accusative suffix in this form is, I believe, unknown to language; and I am therefore led to suspect that the guttural belongs to the base of the pronoun, the suffix of the case (*em* or *en*) having worn off; and this I say with more confidence when I look at *mih-i* (in MSS. often *mich-i*), in which the final *i* is a familiar form of the dative suffix, and again at *meh-e*, which Quintilian tells us was an archaic form of *me* (1, 5, 21). This contraction of *me* would be parallel to *mi* from *mihi*; and *mehe* as an acc. would stand for *meh-em*; and again *meh-e* as an abl. would be in itself tolerably complete. In the corruption of case-endings nominatives and accusatives are commonly the first to suffer. In the Ossetic plural our pronoun it will be seen exhibits an aspirated guttural *ch* throughout. Then as to the German *dich*,

sich, I explain their form, as the result of a desire to bring their declension into agreement with that of the first pronoun, a principle which I believe to have been active in other parts of these pronominal declensions. This tendency may have been aided by the fact that aspirates are ever apt to interchange, and a labial aspirate was in early times the final letter in all probability both of the second personal pronoun and the reflective pronoun, so that *dich* and *sich* may well have grown out of an earlier *dif* and *sif* (cf. the Greek forms of the corresponding pronouns which exhibit an initial σφ for σεφ).

But there remain two questions for solution. Is it an ordinary occurrence for an initial *m* to be thrown off, and why should this accident fall especially on the nominative of this pronoun? First as to the general question, others before me have noticed such loss of an initial *m*, and it will be found that this labial, not unfrequently, first passes into a digamma, and then at times into an aspirate before disappearing altogether. Thus Buttmann in his 'Lexilogus,' § 87, 4, draws attention to L. *mola* ουλαι ολαι; *μαλη αλα*, *μασχαλη αωilla*; *μοσχος οσχος*; *μαλευρον αλευρον*; *μονθυλευω ονθυλευω*; *Mars Αρης*; *mas maris αρρην*; *molo ολμος*. L. S. in their Lexicon add *μια ια*, *μοχλεως οχλεως*; *μηρνω αρνω*, *μυραξ ιραξ*; and I further add E. *man*, *Αναξι-μανδ-ρος*, *Αλεξ-ανδ-ρος*, *Φανηρ*, *ανηρ*; It. *uomo*, L. *homo*, Fr. *hom* or *on (dit)*; G. *man* sagt, prov. *wan* sagt, E. *one* (= *wun*) *says*; *mereo* *earn* compared with *maereo* *mourn* (Go. *maurn-an*); L. *mari-*, S. *vari*; G. *mit*, E. *with*; G. *muth* and *wuth*. *Min* the root of *minor* and *minimus* is seen also in the Slav. *min-ij*, Erse *min*, S. *manak*; and, as Bopp (§ 308) adds, is no doubt one with *wen* of the G. *wenig*; and let me add also one with our familiar adjective *wee*. Nay in the very pronoun before us Bopp himself has been led to suspect the aphaeresis of an *m*, so that the Sanskrit *aham* has grown out of a lost *maham* (§ 333 note), and this same view he tells us is taken by Benfey. Again for the change in Greek from an initial digamma to an aspirate, let me point to the several pairs, *Vesper* Ἑσπερος, *Vesta* ἑστια, *vestis* εσθης, *vermis* and *vermen* by the side of ἔλμυς, for the *θ* in the oblique cases of this noun is excrescent; and lastly the Boeotic *ιωv*, *ιωργα* exhibits, as

before noticed, an aspirate. On the other hand, the nom. of this pronoun naturally endeavours to shrink into smaller dimensions in order to avoid the odium of egotism, while in the other cases the speaker talks not of his own doings, but only of himself as passive.

Then again when *we* is contrasted with *I*, or the Lat. *nos* with *ego*, we are told not to wonder at the adoption of an independent word, inasmuch as the very idea of 'I' is essentially singular, and a plural to it would be illogical. But surely we have such a plural in the nom. *mes* of Lith. and O. Prus., *mu* of O. Slav., *mach* of Ossetic, *mi* of Lapp, to say nothing of the suffixes in τυπτομεν τυπτομες, *scribimus*; and to these instances let me add with Bopp (§ 332, note) from Clough's Grammar a Pali nom. pl. *mayam*.

Hence I was long ago led to the belief that the change of *m* to *w*, of which I have just given instances, furnished the real clue; and accordingly for many years have taught that our *we* is but a dialectic variety of *me*, the loss of the plural suffix no longer causing inconvenience to us, when custom had already established a distinction in the initial consonant. But the German, more conservative than English, still retains such a suffix in *wir* 'we.' Some years back it happened that a gentleman from the German part of Switzerland was attending my lectures; and on the day when I had been dealing with this very question, he came up to me at the close to say, that, where he lived, all the country people used the phrase *mir sagen* in preference to *wir sagen*. I am no way surprised then to find that in the Lith. dual the nom. and ac. *ve-du* and *mu-du* 'we two' coexist; and of course what has been said accounts for the pl. nom. S. *vayam*, Z. *vaēm*, Go. *veis*, and for the dual nom. in O. Slav. *vě*, and in Go. *vi-t*.

The forms which like the L. *nos* begin with an *n* are found in the Gr. dual *voi* etc., S. *nāu* and *nas* in the oblique cases of the dual and plural; also those of the Zend dual, viz. *nó* and *ne*. Add to these some forms in the O. Slav. and O. Pruss. Here again the letter-change is one well established. Already as liquids *m* and *n* are closely allied. At the end of words they

are convertible almost without limit; often so in the middle and even at the beginning of words, as in *χαμ-αι χθον-ος humo; mem-or* for *men-or* from the root of *me-min-i*; *μη nē*. Where a suffix containing an *m* is added to a root already possessed of an *m*, a change of one or the other to the allied liquid nasal is the more admissible; and thus we have a special defence for the initial in O. Slavic of the forms dual d. *nama*, pl. instr. *namī* and dual instr. *nama*. Similarly to a L. *num* corresponds a Gr. *μων*. Such being the case the pl. n. *mū* and the pl. ac. *nū* of O. Slavic are virtually one, and so furnish another instance of the convenient habit, by which two varying forms of one origin have distinct duties assigned to them.

In *nostrum* it is further to be noted that the *s* belongs to the base of the word, while *rum* (*er-um*) represents the double suffix of the case, the *t* being an outgrowth from the *s*, which is more likely to occur when an *r* follows, as in *tonstr-ix* from *tonsor*, and probably *siluestris*, and again in the O. Fr. *estre* and *paroistre*.

The ac. pl. E. *us*, G. *uns*, are next to be considered; and of these *uns* is of course the older, the loss of an *n* before an *s* having been repeatedly seen. But we have still a form even in *uns*, which has evidently suffered compression, as the mere monosyllable has to support the triple duty of theme, case-ending, and plurality. The letters '*ns*' may well represent the two suffixes, so far corresponding to what is seen in the Cretan *οικος* (= *οικος*), as the plural of *οικο-ν*. But the Go. acc. pl. *unsis* and g. *uns-ara* and G. possessive *uns-er* imply that *uns* belongs to the theme, and thus we are brought to a disyllabic *uns-uns*, which falls under the category dealt with in p. 137, and so would naturally be compressed into a monosyllabic *uns*. But in this assumed theme *uns* we have what is utterly unlike those forms which have so far come under notice. The loss indeed of an initial *m* or *w* in a word, especially one which begins with a *u* or *o*, is no doubt of common occurrence, as well seen in the Danish varieties: *uld* 'wool,' *ulv* 'wolf,' *undre* 'wonder,' *ord* 'word,' *orm* 'worm.' But whence the *n* and whence the *s*? As regards the liquid, the Lithuanian forms of the three personal pronouns place it beyond a doubt, that some such form as *man*

represents the pronoun of the first person, viz. loc. *man-yjè*, *tav-yjè*, *sav-yjè*; inst. *man-imi*, *tav-imi*, *sav-imi*. So again the Old Prussian has for datives *mennei*, *tebbei*, *sebbei*. Nay the Lapp exhibits a nom. *mon*. Thus we have on the one side themes ending in a guttural *mich* or *mik*, on the other *man* or *men*; while the S. *as-mat* for *masmat* pleads for a form *mas*. The interchange of *n* and *s* need not detain us, seeing that we have what is precisely parallel in the habitual varieties *φασμα μιασμα* from *φαίρω μαιρω*. But the passage from a guttural to a nasal has repeatedly come before us, as for example, in the L. root *iug* as contrasted with E. *join* (see p. 115), the L. *stern*- by the side of L. *strag*- (p. 177). In such cases the intermediate link was probably the nasal dental *ng*, as seen in *iung-o*. And here we have confirmatory evidence for the present case in the Gothic, as dual ac. d. *ugk-is*, g. *ugk-ara*. But the *s* of *uns-ara*, *uns-er*, is less easy of explanation; and I have no better suggestion to make than that it is an outgrowth of the nasal, as in the G. *gans* (= *χην*), and the L. *ans-er* (cf. *gand-er* with its excrecent *d*).

The forms with an initial *n* have already been discussed; so as to lead to the conclusion that this *n* has superseded a more genuine *m*.

The next question is the origin and true meaning of our theoretic *megmet*, *manmat*, or *masmat*. One would naturally be pleased to find in the word the notion of 'one,' seeing that we give to the pronoun the name of the 'first person'; and indeed we use the familiar phrase 'take care of No. 1.' Now a syllable *μεν* is evidently the base of the Greek numeral *εἰς μία* or *ια ἐν*, accompanied as it is by the particle *μεν*, which stands to its correlative *δε* precisely as 'one' to 'two'; and again this *δε* has a strong likeness to the numeral *δύω*. In the initial vowel of the Latin *oenus*, older form of *ūnus*, we have what looks very like a digamma; and a letter of this power is actually written in the Lith. *wienas*, and pronounced in our own *one* and *once*, whereas from the adverb *only* the sound of a *w* has vanished. Thus here too, as in the pronouns, we see a passage from *m* through a digamma and an aspirate to zero. So too *μον-ος*, which must be

a derivative from $\mu\epsilon\nu$, the root of $\epsilon\acute{\iota}\varsigma$, has beside it a shortened $\omicron\nu\omicron\varsigma$ for the 'ace' on the dice, as well as $\omicron\nu\rho\eta$. The loss of the μ , seen in $\mu\iota\alpha$ $\iota\alpha$ and $\iota\omega$, occurs also in $\omicron\nu\omicron\varsigma$ 'alone.' But the forms of our pronoun point to a variety *masmat*, with an *s* in place of the *n*. Here again the numeral goes with it, for this very word $\omicron\nu\omicron\varsigma$ 'an ace,' takes in Latin the shape *as* (*assis*), which reappears in the French *l'as* (*de pique*), and as regards sound in our own *ace*. I have again and again contended for the frequent interchange of *n* and *s*; and we have here a remarkable confirmation, in that the other Greek noun $\omicron\nu\omicron\varsigma$ also takes for Latin the form *as-inus*, in Eng. *ass*, in Germ. *es-el*. So again between the words $\mu\omicron\nu\omicron\varsigma$ and Lat. *merus* there was in all probability an intermediate form $\mu\omicron\sigma\omicron\varsigma$, precisely as $\mu\omicron\rho\eta$ is one with Lat. *mōra*, and so the two point to a form *mōsa*. These forms *as* and *ace* agree in a striking manner with the nom. of our pronoun, in O. Pruss. *as*, Osset. *az*, Lith. *asz*, Arm. *es*. Then looking to the guttural of *ego*, *egomet*, and my assumed *megomet*, etc., one naturally thinks of the S. *éka* 'one'; and the faint suspicion of a connection between the two words, so suggested, ripens into something like certainty, when, as I gather from Bopp (§ 308, p. 58), the Armenian numeral is *méka*; and the more so, when we further find that the instr. case of the Armenian numeral is *mnow*, which Bopp regards as a compression from *minow*; I should say rather from *mon-ow*.

But this theory will not be complete unless we find an explanation on the same principle for the second personal pronoun: and fortunately the evidence for this is, if possible, still stronger. The classical forms *tu*, $\tau\nu$ (whence $\sigma\nu$), G. *du*, have an unmistakable likeness to *duo*, $\delta\nu\omicron$, *two*. A final labial however must be claimed for the pronoun on the evidence of many languages. To the just-quoted *tav-ųjè tav-imi* of Lithuanian, O. Pruss. dat. *teb-bei*, we must add the S. n. *tv-am*, acc. *tv-âm*, abl. *tv-at*, g. *tav-a*, the Z. ac. *thw-aîm*, abl. *thw-ad*, g. *tav-a*, the old Slav. instr. *tob-ojū*, d. *teb-ě*, g. *teb-e*, etc.; and the labial is again seen in the Gr. dual $\sigma\phi\omega\iota$ $\sigma\phi\omega\iota\nu$ (for $\sigma\phi\omega\iota$ $\sigma\phi\omega\iota\nu$). But here again the comparison holds, for the L. *dub-ins*, *dub-ito*, evident derivatives from the numeral, also exhibit a labial. A strong confirmation

of the present doctrine is found in an outlying language. In Chinese a word, whose sound English writers used to represent by *irr* or *urh*, but the French, probably with more correctness, by *eul*, means at once 'two' and 'thou.' It is true that the pictorial symbols employed by the Chinese for the two ideas are different; but this is a difficulty of little moment, as symbols in that language which happen to have a common sound, though originally intended for different ideas, are frequently interchanged. For example, this very sound *eul*, with a third proper symbol of its own, signifies 'and.' This same symbol however is at times employed to denote the pronoun 'thou' (Endlicher Gr. p. 252). Similarly a certain construction of lines, serving as a picture of a ship, with the sound *leu*, is also in use for 'water,' 'horse,' 'waggon,' 'arrow,' 'fish,' etc., because the same sound *leu* happens also to have these meanings (ib. p. 10). For a third example I take the ordinary Chinese symbol for 'a horse,' in which the four legs, head, mane and tail are sufficiently visible. Now the phonetic name for a horse is *ma*; but this same syllable has in addition the same power for them as for us, viz. 'mother.' Accordingly the symbol is also used for *ma* 'mother' (Morrison's Dict. 7465).

So much for the first syllable of *man-mat*, etc. But what is the second? With some hesitation I answer that we have here what is identical with our own *man*, a word, which, as I have shown above (pp. 86, 7), the Latin and Greek languages shared with our own; and thus the S. *as-mat* may have meant 'man No. 1,' and *yush-mat* 'man No. 2.' I have already contended that the Gr. ἡμεῖς grew out of a lost ἡμετ-ες, and so accounted for the form ἡμετ-ερος; and of course the same reasoning applies to εἴμεῖς and εἴμετερος.

But as *egomet*, *nosmet*, *uosmet*, by their fuller form were well fitted for emphatic use, it was by an easy extension, though somewhat illogical,* that the Romans eventually attached the suffix *met* for the same purpose to the reflective pronoun, as *sibimet*, *semet*, and even to the possessive, as: *intra suamet ipsuni moenia compulere*. Nay from this familiar use of *met* before the cases of *ipse* there got established in one of the Romanic languages an

* But see Prof. p. viii.

indeclinable *pr̄onoun medeps*; and from this there arose, with the utter loss of the labial *p*, *per mi meteis* = 'per memet ipsum,' *se mezeis* = 'semet ipsum,' etc.; and lastly, with almost incredible violence, a provincial superlative, *suetessme* or *medesme*; and thence in Fr. came *m̄isme*, *mesme*, *m̄me* ('This from Diez Etym. Wört.).

On the second pronoun a few remarks remain to be made. First not a few forms exhibit an initial *v* (*w*), as *vam* in the S. dual, *vas* in the S. plural, *váo* in the Z. dual, *vó ve* of the pl. Add to these the whole dual and plural of the O. Slavic; the acc. pl. *wans* of the O. Pruss., the L. *nos*, etc. But again the connection with the second numeral shows itself, as in *uiginti* for *duiginti*; and in the same way the Ital. *venti* is virtually one with our *twenty*. A similar loss is seen in the L. *suavis* for *suaduis*, as shown by the kindred words *áδvs* for *σFaδvs*, E. *sweet*, and the vb. *suadeo* 'make (advice) palatable.'

Another variety is seen in words which have an initial *y* or *i*-consonans, as in the S. crude form *yush-mat*, in the S. dual and plural, the Z. plural, the Lith. d. and plural, and the O. Pruss. pl. n. *iou-s*, g. *iou-son*, d. *iou-mans*, the Go. pl. n. *jus*, E. *you*, *ye*, *your*. But here we have the very change from an original *d* in the L. *Dies-piter*, or rather *Diu-* or *Diou-piter* to *Iuppiter* (= *Iou-pater*), *Iou-is*, and in *de-orsum*, shortened by St. Augustin to *iusum* (It. *giuso*).

The reflective pronoun came under consideration in the treatment of the reflective verb (pp. 202-7), where the crude form was seen to have been L. *seb*, Gr. *σεφ*, from which there come with the loss of the vowel *σ'φ-εis*, *σ'φων*, etc. To what is there said, it may be expedient to add, that we have probably the same root in our own adj. *same*, with the original notion of 'one,' so that the L. *sem-el* 'once,' and *sim-ul*, or as Plautus seems to have written the word, *sem-ul*, 'at the same time,' a synonym for *una*, are of the same stock; and so also the first element in the compound forms L. *sim-plex*, *sim-plus*, *sing-uli*, *sim-ilis*, *sim-itu* (= *uno icu*), and *sin-cerus*. The last of these words needs perhaps a little explanation. It is usually connected with *cera* 'wax,' and the phrase *uas sincerum* of Horace is quoted in support of the

etymon. I am strongly inclined to think that the second element in the word is a very different noun, lost indeed for the Latin, but still surviving in the Ital. *cera* 'face,' one with our own *cheer*, so that *sincerus* was the opposite to our 'double-faced,' and to the epithet *duplex* as used of Ulysses by Horace. To these again let me add the Gr. ἄμ-α, ἅπλως, ἅπ-αξ (for ἅπ-ακις), ἅπ-ας (= *om-nis*), οὐδ-αμ-ος, ὁμ-ον, etc., and again on the Teutonic side, G. *samm-el-n*, *zu-samm-en*, Dan. *sam-tykke* 'consent,' *sam-klang* 'harmony,' *sam-tidig* 'contemporary'; nay also the Gr. *συν* and L. *cum*. The ideas of 'one-ness,' 'same-ness,' 'union,' and 'entirety,' are beyond doubt closely connected.

Lastly, as concerns the reduplication of personal pronouns for purpose of emphasis, the form *memet* is commonly treated as an instance of reduplication, but perhaps erroneously, as this may be only the pronoun in its fuller form, as explained above. Still it seems in the end to have been regarded as reduplicate, and so to have suggested such forms as *tute*, *sese*, etc. On the other hand the emphatic *εμε*, *εμοι*, *εμου*, as opposed to *με*, *μοι*, *μου*, were probably themselves decapitated from *μεμε*, etc.

CHAPTER XXIV.

PERSONAL PRONOUNS AS SUFFIXES.

THESE may be considered under the several heads of suffixes to verbs as denoting the agent, of suffixes to prepositions, and thirdly to nouns with the power of possessives. In the first of these uses it may help the inquiry if a table be given of the suffixes in the several languages belonging or allied to our Indo-European stock, as :—

	<i>Singular.</i>			<i>Plural.</i>		
S.	bharāmi	bharasi	bharati	bharāmas	bharatha	bharanti
Z.	barāmi	barahi	baraiti	barāmahi	baratha	barenti
Gr.	φερω	φερεis	φερει	φερομεν	φερετε	φερουσιν
L.	fero	fer(i)s	fer(i)t	ferimus	fer(i)tis	ferunt
O. Sl.	beruñ	bereshi	bereti	beremñ	berete	beruntñ
Go.	baira	bairis	bairith	bairam	bairith	bairand
O. G.	piru	piris	pirit	pirames	pirat	pirant
A.-S.	bere	berest	beres	b-raz	beraz	beraz
O. N.	ber	ber(r)	ber(r)	berum	beris	bera
Erse *	berim	beri	{berid beres }	berme	berthe	{berit berte }
Lith.	sukù	suki	sùk(a)	sùkam(e)	sùkat(e)	sùk(a)
Oss.†	khanin	khanis	khani	khanam	khanuth	khanine
Lapp.‡	molsoib	molsoi	molsoi	molsoime	molsoite	molsoin
Finn.§	maxan	maxat	maxaa	maxamme	maxatte	maxawat

* Zeuss (ed. Ebel) Gr. Celt. p. 427.

† From Rosen.

‡ *Molso* 'change,' Fiellström, p. 67.§ *Marä* 'loosen,' Vhael, p. 80.

To these add the dual forms for those languages which possess them :—

S.	bharâvas	bharathas	bharatâm
Gr.	————	φερετον	φερετον
Go.	bairôs	bairats	————
Lith.	sùkava	sùkata	sùk(a)
Lapp.	molsoimen	molsoiten	molsoikan

Add the forms for the so-called substantive verb :—

<i>Singular.</i>				<i>Plural.</i>		
S.	asmi	asi	asti	smas	stha	santi
Z.	ahmi	ahi	asto	hmahi	sta	henti
Gr.	εμῖ	εσσι	εστιν	εσμεν	εστε	εισιν
L.	sum	es	est	sumus	estis	sunt
O. Sl.	yesmi	yesi	yesi	yesmŭ	yeste	suntŭ
Go.	im	is	ist	si(j)um	si(j)uth	sind
O. G.	pim	pist	ist	pirumes	pirut	sint
A.-S.	eom	eart	is	sind	sind	sind
O. N.	em	ert	er	erum	eruz	eru
Lith.	esmi	esi	esti	esme	este	esti
Erse*	am	at	as(is)	ammi	adib	it

The dual forms for the several languages are :—

S.	svas	sthas	stas
Gr.	————	εστων	εστων
O. Sl.	yesvê	yesta	yesta
Go.	si(j)u	si(j)uts	————
Lith.	eswa	esta	esti

It was a common practice, in the classical languages, for the purpose of emphasis to prefix an independent pronoun as the agent, though the idea was already denoted in the suffixed pronoun; and so it was but natural that the latter should be corrupted, as superfluous, or at any rate devoid of importance. Again in the course of time the use of an independent pronoun

* Zeuss, Gr. C. p. 487.

becoming general, the suffixes were apt to drop off altogether as being mere surplusage. Nay in some cases a common form of suffix shows itself in the plural, as in the A.-S. *berað*, G. *sind*, E. *are*, distinction being then no longer necessary.

But let us look at the suffixes in detail. The Sanskrit, as in *bhar-āmi*, *bhar-āmi*, gives the suffix of the first person in its fullest form, where *āmi* closely approaches to the original *asmi*. In the Gr. *δίδωμι* the long vowel in part perhaps belongs to the pronoun, but in *τιθημι* (for *τι-θεσ-μι*) only *μι* can be claimed for it; and the same is the case for many verbs alike in S. and in Gr., as S. *asmi* 'I am,' *ēmi* 'I go,' *admi* 'I eat'; Gr. *εμι* for *εσμι* 'I am,' *ειμι* 'I go'; and Lith. *esmi* 'I am,' *eimi* 'I go,' *edmi* 'I eat,' *dūmi* 'I give,' *dēmi* 'I place,' *stōwmi* 'I stand,' *sēdmi* 'I sit,' *gelbmi* 'I help.' On the other hand not a few verbs drop the *i*, but still retain before the *m* a vowel belonging to the pronoun, either *o*, or one of its neighbour vowels *a* or *u*, as L. *sum*, *inquam*, and *sciam*,* which, as I have already said, is at times but a fuller form of *scio*. Add O. G. *tu-om*, O. Sax. *bi um*, A.-Sax. *be-om* and *eom*. So too one of these vowels is seen in the pl. forms, as S. *bhar-āmas*, *τυπτ-ομεν* or *τυπτ-ομες*, L. (*e*)*s-umus*, *uol-umus*, O. G. *pir-umes* 'we are,' *vall-ames* 'we fall'; and slightly weakened in *scrib-imus* (cf. *optumus optimus*, *decumus decimus*, *genubus genibus*). But this form *om* again undergoes curtailment. The Greek language, unable to tolerate a final *m*, prefers *τυπτω* to *τυπτομ*, but exhibits some compensation in the long vowel. Similarly the Latin has *ero*, *fuero*, *scribo*, *scripsero*, but the *m* again reappears in the plural. A *u* rather than *o* is seen in Lith. *sukū* and O. G. *piru*, while the Gothic, as usual, prefers an *a* to *o*, as *gīḥa*; and here again the pl. retains the *a*, as *gībam* 'we give.' On the other hand the *o* itself often vanishes,

* For example, in "Haud sciam an ne opus sit quidem nihil unquam omnino deesse amicis," Cic. Am. 51; "Quod haud sciam an tu primus ostenderis," Cic. Or. 1, 255; "Haud sciam (So Paris M.) an iustissimo triumpho . . . triumphauerit; non ero quod sciam," Pl. Capt. 2, 2, 15; "Tantumst quod sciam," Pl. Mere. 3, 4, 57; "Non edepol ego te, quod sciam, umquam ante hunc diem uidi," Pl. Men 3, 2, 37; for in the old writers the subj. was not used in these phrases.

leaving a mere *m*, especially after a vowel, as *scribēba-m*, *scriba-m*, *ueli-m*, *scribere-m*. Add Go. *im* 'I am'; O. G. *pim* or *bim*, *gám*, *stám*; O. Sax. *dóm*; E. *am*. Not unfrequently the *m* is supplanted by an *n*, as in *εγραφον* (cf. *εγραφομ-εν*), *εγεγραφειν* (cf. *εγεγραφεμεν*), *ετιθην*, etc. Lastly the suffix altogether vanishes, as in *εγραφα*, *εγεγραφεα*, *scripsi*.

As the crude-form of the second person seems to have had at the outset a final labial, viz., Lith. *tav*, L. *teb*, Slav. *tob*, so we find a trace of the same in the form of the suffixed pronoun as favoured by Chaucer (vv. 9360, 16949, 17227 of Wright's edition):

"And thanne schaltow nought repente the."

"Has thou (hastow?) had fleen at night or artow dronke?"

"Now shaltow, false thef, thy song forgoon,
Ne never in al thy lyf ne schaltow speke."

But at times both an *s* and a *t* are kept, as though standing for *-est thou* (vv. 4168, 4344, 5096, 15563):

"Herdistow ever slik a sang er now?"

"For many a pastey hastow lete blood
And many a Jakk of Dover hastow sold."

"Thus hastow doon and yit I holde my pees."

"Now maystow wepe with thine eyghen blinde."

So *bistu*, *ginnestu*, *scadestu*, are quoted by Bopp (§ 448 f.) from Graff (p. 80); but I would add that in the first of the three the *s* may be part of the theme.

For the most part *s* is preferred to *t*, while in the older varieties the vowel *u* is weakened into an *i*, as in S. *bhar-asi*, *rah-asi*, where the short penult *a* seems to be a connecting vowel; and a similar connecting vowel is probably seen in the old Slavic *padeshi* 'cadis,' *veseshi* 'vehis,' *pijeshi* 'bibis,' where note the *sh*. Then without a connecting vowel we have the Doric *ω-σι* and the Lith. *es-si* 'art,' *gēlbsi* 'helpest,' etc. (Bopp, § 448);

while in the Greek forms *οἶδα-σθα*, *ἤ-σθα*, *ἐφῆ-σθα*, the *θ* is no doubt exerescent, according to the habit of the language; but in *ἴσ-θι* 'be,' *ἴσ-θι* 'know,' the *σ* belongs to the theme, as is shown by comparison with the imperatives *δεικνῦθι*, *ἴσταθι*, *δίδοθι*, whereas *τιθετι*, *τυφθητι*, only fail to exhibit a *θ* because of the preceding aspirate. The S. *vêt-tha* (for *vêd-tha*) and the equivalent *οἰσ-θα* (V. G. § 453) have *th* without the sibilant, but here the *t* and the *σ* though belonging to the theme, may be doing double duty. But in the L. *scripsis-ti* the original *t* is preserved. Again, by a loss of the final vowel, we have with a connecting vowel, the L. *scrib-is*, the O. G. *bairis* = *fers*, *vigis* = *uehis*, Oss. *khanis*. Nay the old Sc. dialect still retained the suffix in this form, as:—

"So stand^{is} thou here in this warldes rage

And want^{is} that should guide all thy viage."*

Then without the connecting vowel we have the L. *fers*, *eras*, *scribebas*, etc.; Gr. *τιθης*, *ἴστης*, *εγραψας*, *θες*, *δος*; S. *bharés*, *rahés*. In Norse the *s* passes as usual into an *r*, as *kallar*. The same *s* or rather *θ* is supplanted by a cognate *ν* in the Gr. *τυψον* for *τυψαθι*; and again as in the Gr. *οἶδα-σθα* we found an exerescent *θ* growing out of the sibilant, so a similar *t* appears in A.-S. *ber-est*, E. *bear-est*. Again the original *t* without a vowel appears in Go. *vaist* = *οἰσθα*, and in our *wilt*, *shalt*, *art*. While the L. *scribis* still retained the sibilant in the indicative, the same when employed as an imperative drops the *s*, and then as usual in such cases an *ē* is preferred as a final, *scribe*, *age*; and here the Gr. coincides with its *γραφε*, *αγε*. Lastly this vowel also vanishes in L. *fer*, *fac*, *ama*, *audi*, etc.; and the same is true of many other languages, where the bare theme of a verb is said to be available for an imperative. How *φερεις* obtains its diphthong I fail to see, for I have no faith in the metathesis of the vowel, as if it stood for *φερεισι*.

The suffix of the third person has its purest form in *τιν* of *εσ-τιν*, representing an older *τεν* or *τον* (see below). But the final *ν* is commonly dropt leaving us *τι*, as in *εσ-τι*, Dor.

* Quoted by Fielder from 'King's Quhair,' p. 29.

τιθητι. So too S. *as-ti*, O. Sl. *jes-ti*, Lith. *esti*; or again S. *dadāti*, Gr. *δίδωτι*, O. Sl. *dasti*, Lith. *dūsti*. But again, as with the first and second persons, the final *i* drops off, as in L. *est*, *fert*, *uolt*, *scribat*, *scripsi(s)t*, *siet*, S. *syāt*, *bharēt*. At times a connecting vowel shows itself, as was the case with the second person, as in S. *bhar-ati*, *vah-ati*, O. Sl. *ber-eti*, *veš-eti*, while the L. exhibits the same, but with the loss of the final vowel as before, *scribit*, *uchit*. But of course this *t* in our language should be represented by *th*; and thus we are brought to E. *bear-eth*, corresponding to the O. G. *bair-ith*, a suffix which has now with us given place to a mere *s*, as *bears*. But already in Greek a sibilant had supplanted the *τ*, as in *τιθησιν* or *τιθησι*, etc., of the older language. But the consonant of the suffix altogether vanishes in the later forms, as *φέρει* for *φερετι*; and still more complete is the disappearance of the suffix in our *will*, *shall*, *may*, *can*, *dare*. But here our habit of prefixing the pronoun prevents all confusion; and on the same principle the Lithuanian has an excuse for employing merely the theme of the verb in the third person alike for singular, dual, and plural.

The plural of the first person in its fullest form has just been given, as S. *bhar-āmas*, Gr. *τυπτ-ομεν* or *-ομες*, L. *(e)s-umus*, O. G. *vall-ames*, *pir-umes*; to which let me add, what is interesting, as showing how old forms still at times survive in provincial speech, *ponimus*, *semus* = *sumus*, *devimus* = *debemus*, *podimus* = *possumus* of the Sard dialect. In the forms just given we have suffixes of plurality, *as*, *es*, *en*, all but one with those which presented themselves in the declension of nouns. But the final consonant is lost for the Lith. *stōw-ime*, *dū-me*, *vēz-ame*, and O. Sl. *staj-emŭ*, *do-mŭ*, *veš-emŭ*, the representatives of the L. *stamus*, *damus*, *vehimus*. Add Lapp *molso-ime*. So too in the Gothic the subjunctive forms give us, with a final vowel, pres. *gibaima*, pret. *gabaima*; but in the indie., with loss of final vowel, *gib-am*, *gab-um*; like the O. N. *gefum*, *gafum*; and this led to no inconvenience, in as much as the singular had already thrown off the *m*, in the forms Go. *giba* 'dono,' *gab* 'donau,' O. N. *gef*, *gaf*. But the Oss. *khanam* is less distinguished from the sing. *khanin*.

The second person of the plur. has the suffix intelligibly

expressed in *tis*, fairly representing a plur. of *tu*, as in *scripsis-tis* compared with *scripsis-ti*; and as in some of the preceding cases, we find at one time a connecting vowel, as in *scrib-itis*; at other times none, as in *es-tis*, *fer-tis*, *uol-tis*. But the *s* is lost in Gr. *φερετε*, *φεροτε* = S. *bharēta*; Lith. *stow-ite*, O. Sl. *stajete*, *berete*, L. *scribite*, Lapp *molsoite*, Finn *maratte*; while the S. more frequently substitutes a *th* for *t*, as *bharatha* = *fertis*. Next the final vowel disappears, as in Go. *gibith*, *gabuth*, O. N. *gefídh*, *gafudh*, O. G. *vallat* = *caditis*, *víalut* = *cecidistis*.

The third person-ending has its fullest form perhaps in the Doric *λεγ-οντι*, commonly cut down to *λεγ-οντι*, while the L. has the still shorter *scrib-unt*. Here we have a suffix closely resembling the W. *hwynt* 'they'; but, as was stated above, *οντι* is a truer form, of which *ov* is the theme, *τ* excrement, and *υ* a suffix of plurality. The S. *s-anti*, *bhar-anti*, are not unlike *λεγ-οντι*; and again the Sard still retains the vowel, as *iscinti* (p. 16), *sunti* (18), *servinti* (187), *fainti* (195), *currinti* (197), *birinti*, *bolinti* (243), *ante-poninti* (245), all taken from the Compendio or Catechism spoken of above, while the numbers refer to the pages. Yet in the same island shortened forms are also in use, as *sunt* (p. 23), *servint* (24), *andant* and *vivent* (30), *observant* (31), etc. Add the O. G. *vallant* = *cadunt*; and what differs but little the Go. *gib-and*, A.-S. and G. *sind*. But the *t* also vanishes, especially in Greek, which could not allow a final *nt*. Hence *εφερον*, *ησαν*, with S. *abharan*; and so the perfects, Go. *gab-un*, O. G. *víalun*. Add G. *schreiben*, Lapp *molsoin*. The O. N. goes a step farther, dropping the *n*, as pres. *gefa*, pret. *gafu*. Again in some languages, as our own, the whole suffix is lost; and this is in effect the habit of French, which in *aim-ent* writes indeed *ent* but gives the syllable no expression. Lastly, in the A.-Saxon the three persons of the plural have all the same suffix; it may be *on* as in *gafon* 'we, ye, they gave,' or *adh* as *gifadh* 'we, ye, they give,' or *gife* the same.

Lastly, it may be noted, that in our own language it was once permitted to omit the independent pronoun in the second person, and this because the suffix is maintained in some purity. Thus Shakspeare has (*Othel.* 3, 3):

“Hast stolen it from her?
 Wilt break my heart?
 Fellow, where goest?”—

Personal Pronouns as suffixes to Prepositions.—This combination abounds in the Keltic languages. Thus from Zeuss (as edited by Ebel) I take the following examples belonging to the old Erse: 1. *in* (Lat. *in*), whence *indiumm* ‘in me,’ *indid* ‘in eo,’ in which the excrecent *d* deserves notice (p. 627); 2. *for* (*far*) = G. *über* or *ver*, L. *super*; whence *form* ‘de me,’ *fort* ‘super te,’ where *for* corresponds to L. *per*, i. e. in my view a decapitated variety of *super* (p. 628); 3. *o* (*ua*) ‘ab,’ with *uáim* ‘a me,’ *uáit* ‘a te,’ *húad* ‘ab eo,’ *uáin* ‘de nobis’ (p. 631); 4. *os* (*uas*) ‘super,’ with *uasum* ‘supra me’ (p. 634).

Similarly for modern Welsh there occur: *at* ‘to,’ with *ataf* ‘to me,’ *atat* ‘to thee,’ *ato* ‘to him,’ *ati* ‘to her,’ *atom* ‘to us,’ *atoch* ‘to you,’ *atynt* ‘to them.’ *Heb* ‘without,’ whence *hebof* ‘without me,’ *hebot* ‘without thee,’ . . . *hebddynt* ‘without them.’ *Can* or *gan* ‘with,’ whence *genyf* ‘with me,’ *genyt* ‘with thee,’ *ganddo* ‘with him,’ *ganddi* ‘with her,’ *genym* ‘with us,’ *genych* ‘with you,’ *ganddynt* ‘with them;’ and so on.

Such union of preposition and pronoun belongs no doubt to all languages; but what characterizes the Keltic use of the same is the corrupt form of the pronoun, which naturally results from its degraded office as a suffix. But it may be useful to note that in Latin also the treatment of such words as closely united serves to explain some little difficulties. In the *Andria* (5, 3, 28) occurs the line, “Hóc modo (pron. *mo*, as recommended p. 131) te obsecro út ne credas á m(e) adlégat(um) hún(e) senem,” where the emphasis lies on the pronoun, as indeed is shown by the very place of *adlegatum*, as well as by the meaning; yet the pronoun is elided, so that the metrical accent cannot fall upon the *e*. But if a *me* constitute one word, *am*’ receiving the accent gives prominence to what remains of the pronoun. In the same way, in another line of the same play (2, 3, 5), “Sét sí tú negáris ducer(e) í(bi) culpam ín-te tránsferet,” the metrical accent falls on the *in* of *in-te*, not on the pronoun; but again, for the same

reason, this gives no offence. Compare too Phorm. 2, 2, 3; 5, 1, 38.

Possessive Pronouns as Suffixes.—I first noticed this combination in the Lapp language, and so drew attention to it in the Transactions of the Philological Society* (vol. 2, p. 182), quoting from Fiellström's Gr. (p. 32):—

<i>N. mon</i> I	<i>todn</i> thou	<i>soden</i> he.
<i>G. mo</i> of me	<i>to</i> of thee	<i>so</i> of him.

And then from pp. 20, 21:—

<i>parne</i> son	<i>parnam</i> my son.
<i>nipe</i> knife	<i>nipat</i> thy knife.
<i>ajja</i> grandfather	<i>ajjabs</i> his grandfather.

And with this I subsequently compared the Persian forms, such as from *dar* 'door,' *daram* 'my door,' *darat* 'thy door,' *darash* 'his or her door.' The same forms, I am told, when connected with verbs, denote the oblique case, dat. or acc., as *goft-ash* 'said to him.' †

And thus here again we find in the Lapp not merely pronouns all but identical with those which belong to the classical languages, but a common habit of combination.

The subject is one on which Mr. Garnett also has dwelt; and I may borrow from his paper in the same Transactions (vol. iv. pp. 16, 17, 18) the following parallel examples, taken from languages akin to the Lapp, as first Wotiak:—

<i>pī</i> (for <i>pi-ī</i>)	<i>filius mei</i>	<i>bera-i</i>	<i>dixi</i>
<i>pi-ed</i>	,, <i>tui</i>	<i>bera-d</i>	<i>dixisti</i>
<i>pi-ez</i>	,, <i>ejus</i>	<i>bera-z</i>	<i>dixit</i>
<i>pi-my</i>	,, <i>nostri</i>	<i>bera-my</i>	<i>diximus</i>
<i>pi-dy</i>	,, <i>uestri</i>	<i>bera-dy</i>	<i>dixistis</i>
<i>pi-zy</i>	,, <i>eorum</i>	<i>bera-zy</i>	<i>dixerunt.</i>

Again from the T'cheremissian, he places alongside of each other:—

* In a Paper read Jan. 16, 1846.

† For this and for other aid I have to thank my colleague Prof. Ricu.

<i>ata-m</i>	pater mei	<i>ischtene-m</i>	faciam
<i>ata-t</i>	,, tui	<i>ischtene-t</i>	facias
<i>ata-sha</i>	,, sui, ejus	<i>ischtene-she</i>	faciat
<i>ata-na</i>	,, nostri	<i>ischtene-na</i>	faciamus
<i>ata-da</i>	,, uestri	<i>ischtene-da</i>	faciatis
<i>ata-sht</i>	,, eorum	<i>ischtene-sht</i>	faciant.

Mr. Garnett's immediate object in these quotations was to show that the personal endings of the verb are genitives, not nominatives. But this is a matter, which for me has little importance, seeing that, as I stated above (p. 19), the genitive shares the idea of 'whence' with the nominative, and so has as good a right to represent the agent.

The first part of 'Das Verbum der griechischen Sprache,' by Georg Curtius, has this moment come to hand, and in p. 25 I find quotations of a like kind, first from the Magyar :—

<i>várt-am</i>	ich habe gewartet	<i>hal-am</i>	mein Fisch
<i>várt-ad</i>	du hast ihn erwartet	<i>hal-ad</i>	dein Fisch
<i>várt-a</i>	er hat ihn erwartet	<i>hal-a</i>	sein Fisch
<i>várt-unk</i>	wir haben gewartet	<i>hal-unk</i>	unser Fisch.

And then from the Ostiak :—

<i>pane-m</i>	ich legte	<i>ime-m</i>	meine Frau
<i>pane-n</i>	du legtest	<i>ime-n</i>	deine Frau
<i>pane-t</i>	er legte	<i>ime-t</i>	seine Frau.

And from the Yâkut :—

<i>byst-ym</i>	ich schnitt	<i>bas-ym</i>	mein Kopf
<i>byst-yu</i>	du schnittst	<i>bas-yu</i>	dein Kopf
<i>byst-a</i>	er schnitt	<i>bas-a</i>	sein Kopf.

So far the pronominal forms are suffixed. But we find them prefixed in one member of the Caucasian group of languages (Mr. Garnett's Paper, vol. 4, p. 23) ; and this alike with nouns and verbs, as :—

<i>s-ab</i>	'pater mei'	<i>s-nehoit</i>	'oro'
<i>w-ab</i>	' , , tui '	<i>u-nehoit</i>	'oras'
<i>i-ab</i>	' , , ejus '	<i>i-nehoit</i>	'orat'
<i>h-ab</i>	' , , nostri '	<i>ha-nehoit</i>	'oramus'
<i>sh-ab</i>	' , , uestri '	<i>sh-nehoit</i>	'oratis'
<i>r-ab</i>	' , , eorum '	<i>r-nehoit</i>	'orant.'

CHAPTER XXV.

THIRD-PERSON PRONOUNS.*

THE next problem is of great extent, as it has to deal with all the pronouns of the third person, including, to take our examples from English, the definite article *the*, the demonstratives *this* *that* and *yon* or *yonder*, the personal pronouns, *he* *she* *it* *they*, the relatives and interrogatives *who*, *what*, the indefinite *some*, together with the adverbs and conjunctions connected with them, viz., *so*, *thus*, *as*, *here*, *hither*, *hence*, &c.; *now*, *then*, *when*; *though*, *than*; and lastly the compounds *such* and *which*.

The result at which I hope to arrive is that all these words are of one stock; but for clearness it seems necessary to break up the inquiry into different sections. I proceed then first of all to show, that as a matter of fact, the several classes run into one another, so far as use is concerned, viz.: that there is no substantial distinction between the definite pronoun *the*, for example, and the demonstrative *this*; that among demonstratives themselves the same word may be applied to things near and to things remote; that from demonstratives are deduced the forms employed for all personal pronouns of the third person with the sole exception of the reflective pronoun; that demonstratives are available as relatives; that there is no substantial distinction between relatives and interrogatives, or between relative and indefinite pronouns. A second branch of the argument will deal with the forms, leading us to the result that they are all

* The first sketch of this paper was read before the Philological Society, March 26, 1847, and then, with a few changes, printed as an appendix to the 'Alphabet, etc.', in 1849.

deduced from a common origin. A third will discuss the original meaning of this common form; and finally I shall endeavour to show that this meaning is such as to account for all the varieties in the uses of the pronouns.

Although I have thus started from the vocabulary of our own language it will fall within my duty to discuss the pronouns generally of the Indo-European family, and even to glance occasionally at outlying languages, which the German school for the most part religiously shun.

The free intermixture in use of the several classes of pronouns claims our first consideration; and here I start from the fact that the so-called definite article was in origin a demonstrative pronoun. This is clearly seen in the early language of Greece, as in the *Iliad*, *τα δ' ἀποινα δεχέσθαι* 'and receive this ransom,' shewing it; *την δ' ἐγὼ οὐ λυσω* 'but this woman I will not let go'; and the later language, in certain adverbial phrases, continued to exhibit traces of the same use, as in *πρὸ τοῦ* 'before this,' *τῷ* 'for this reason.' The Latin language is without a definite article, unless the name be conceded to the pronoun *hic*. In the Anglo-Saxon "the demonstrative pronoun *þæt se séo* is also used," says Rask (Gr. § 146) "for the article"; and in the Romanic languages, *lo, la, le*, etc., are of course corrupted forms of the Latin *ille*, etc.

Secondly, there is no original distinction between demonstratives which point to near and to remote objects. Thus Bopp (V. G. § 371, Transl.) says: "That which in Sanskrit signifies *this* means also for the most part *that*, the mind supplying the place whether near or remote." In Greek again the old grammarians appear to have agreed that *κηνος, τηνος, κεινος*, and *εκεινος* were but dialectic varieties of one word (see Ahrens de dial. Dor. p. 267); and Ahrens himself, while he wishes to make out that *τηνος* is of a different origin from the three others, yet admits that at times it is used like *εκεινος* for a distant object, though more commonly for one that is near. Our own *that* again, as opposed to *this*, now carries with it the notion of greater distance, yet it is closely connected with the pronoun *the*, since it represents the German *das*, which serves as the

neuter of *der* 'the.' The Slavic languages have demonstrative pronouns beginning with a *t*, like the Greek *το του*, &c., which for the most part mean 'this,' and a second set in the form *on* or *won*, which for the most part mean *that*; yet the Russian demonstrative *он* *она* *оно* is translated by Hamonière 'cela' or 'ceci'; and to the simpler adjective *он* he gives the distinct meaning of 'ceci' as opposed to 'cela.' So too generally in the Slavic languages, *on*, *она*, *оно*, or *won*, *wona*, *wono*, as used for the personal pronouns 'he, she, it,' claim connection with the idea rather of 'this' than of 'that.' It is indeed because the true office of *hic* and *ille* is simply to point, that a repetition either of *hic* and *hic*, or of *ille* and *ille*, is available for contrasting two different objects, precisely as *hic* and *ille* are employed for the same purpose. Thus Ovid, describing the half-military character of the neighbouring farmer in his place of exile says: "Hac arat infelix, hac tenet arma manu"; while a repeated *ille* serves the same purpose in Ter. Ph. 3, 2, 16, and elsewhere (cf. too Mayor's Juv. 10, 91). In fact such repetition of the same word with a reference to different objects is also to be seen in the use of *alius* . . . *alius*, of *alter* . . . *alter*, of *tu* and *tu*, of *tuus* and *tuus*. (See Essays, pp. 172, 173.) We have now a marked distinction between our *here* and *there*, *hither* and *thither*, etc.; yet the forms with *th* in English cannot be separated from the pronoun *the*, to which the notion of 'this' originally belonged; and further, under Rask's law, this initial *th* represents the τ of the Greek *το του*, etc., which again means 'this' rather than 'that.'

Without saying either yea or nay to the question whether the following forms have any affinity with our European pronominal stock, it is to the present purpose to notice the fact that in Mantchou (Gabelentz, Gr. p. 38) and Mongol (I. J. Schmidt, Gr. p. 46) *ere* 'this' corresponds to *tere* 'that,' precisely as our *here* to *there*; and again, in the former language, we have *ouba* 'this,' *touba* 'that'; and *enteke* 'huius-modi,' *tenteke* 'illius-modi.'

As to the substantial identity of the personal pronouns *he*, *she*, *it*, &c., and the demonstrative pronouns, it is perhaps enough to point to *hic*, *haec*, *hoc*, so used, or to the French *il* *le*, *elle* *la*. So

too the pronoun *is*, *ea*, *id*, also supplies forms for the persons. This pronoun, though it eventually ceased to have a demonstrative power, was in origin but a corruption of that which lies at the base of *hic*, *haec*, *hoc*. The *c* of this latter pronoun is no original part of the word, and indeed is not seen in the forms *hi*, *hae*, *his*, *horum*, &c., nor in the compounds *ho-die* or *horsum* for *ho-uorsum*. I have already (p. 219) pointed out that *hi* and *his* and even a sing. nom. *his* ought to be included in the declension of *is*, *ea*, *id*, in our grammars, although the editors of Cicero still persist in a general preference of the forms *ii* or *i*, *iis*, *is*, or *eis*. Thus when Baiter, etc., in the text of Cicero insert these, there will generally be found a note to this effect: "MSS. *hi* (*his*)."
 So habitually in Nipperdey's Caesar, the MSS. A. B. E. f. have *hi* and *his*, where he and other editors generally prefer *ii* and *iis*, and this even in that use before a relative, where the relative clause alone defines the 'who,' as *hi qui flumen transissent* (1, 13, 5); *etiam hi qui magnum in castris usum habebant* (1, 39, 5); *de his* (so N. for once) *rebus quae agi coeptae erant*. So again in Halm's Quintilian an *ii* or *iis* of the text in the notes regularly receives its due correction into *hi* or *his*. In the Juridical writers these liberties with the text are less taken; and accordingly in Ulpian, etc., the ordinary phrase is *de his qui in potestate sunt*, and so on, where *his* must be the ablative of *is*, not of *hic*. It was probably because of the commonly less emphatic character of *is ea id*, compared to *hic haec hoc*, that the *h* was lost for this pronoun. So our English *it* is no doubt one with the L. *id*, yet it has grown out of the A.-Sax. *hit*; and indeed a genitive *his* for a long time maintained its ground in our language with the power of *its*. In proof of this the English Bible presents abundant examples. Thus the first chapter of Genesis has v. 11, "the fruit tree yielding fruit after *his* kind, whose fruit is in *itself*"; and the first chapter of Leviticus v. 6, "he shall flay the burnt offering, and cut *it* into *his* pieces."

The intimate relation which exists between the relative and the definite article or demonstrative pronoun is clearly seen in a comparison of the Greek forms, $\delta\varsigma$ η and δ η , for the σ of $\delta\varsigma$, which alone distinguishes them, is but the nominative suffix,

and so no part of the base of the word. Nay in some cases *ὅς* takes the place of *ὁ* or *οὗτος*. Thus Apollonius Dyscolus (p. 71 Bekker's ed.): *ἡ ὅς τὴν ἰσὴν σημασιαν εχει τῇ οὗτος: ὅς γὰρ ρα μάλιστα ἦνδανε κηρυκῶν· καὶ Πλατῶν, ἡ δ' ὅς*. In the neuter of the article, *το*, and in the great majority of the oblique cases, a *τ* presents itself, but this too constitutes no substantial difference, as in the old language the relative also has a *τ*, especially in Herodotus, as, for example, *θουοσι τῇ Παρθενῷ τοὺς τε ναυηγους καὶ τοὺς ἀν λαβοσι*. So with ourselves *that* habitually has assigned to it the office of a relative, as 'the man *that* I am speaking of,' herein following the A.-Saxon. Thus Rask in his Grammar (p. 57 of Thorpe's translation): "The demonstrative pronoun *þæt*, *se*, *seó*, is also used relatively, and is in general repeated in a sentence, so that in the first clause it stands as a demonstrative, and in the next as a relative, as: *hátan þæt sælfa þæt náne ne beóð, to call those blessings which are none; se man se þæt swifte hors hafað, the man who has the swift horse.*" Similarly in German the third chapter of St. John, within the compass of five verses, has: *Wir reden das* Wir wissen, and *zeugen das* Wir gesehen haben; *Des Menschen Sohn der* im Himmel ist; *Alle die* an Ihn glauben. But besides the adjective *that* we find also a relative use of the adverb *there* again and again in Chaucer, as: (Nonnes Priestes Tale) "for in an oxes stalle This night shall I be mordred *there* I lie." Nay in A.-Saxon an indeclinable *þe* is used alike for the definite pronoun and for a relative, as in: *þæt micle gegeteld þe Móises worhte* 'the large tent which Moses wrought.' The same pronoun *þe* may even be used at once for the personal pronoun 'he' and the relative 'who,' as: *þe þe on me belyfð* 'he who believeth in me.' In Welsh also, to take one of the Keltic stock the ordinary combination for the relative is *yr hwn m.*, *yr hon f.*, that is literally, 'the this.' Then again, turning to other quarters, I find Bopp (§ 383) saying: "in Zend the relative also occurs with the meaning of a demonstrative." For example the acc. *yim* of the Zend relative is used in the sense of 'hunc. And in Dobrowsky (Instit. p. 608) there occurs the passage: "Utuntur interpretes relativo ad exprimendum Græcorum

articulum ὁ ἡ το, quo carent Slavi." Add from the Finn (Vhael's Gr. p. 47): *hän sã tuo* alias Demonstrativa, alias Relativa sunt. Even in Latin the relative has at times the power which rather belongs to *is ea id*, especially in parenthetical phrases, such as: '*qua (=ea) erat temperantia*,' '*ut est homo*' (= '*sic est homo*'); also in: *quod cum audisset*; and the double *qua* in phrases like '*qua uiri qua mulieres*' seems to require for its literal translation, 'along here the men, along here the women.' In the same way I would explain the combination *quum . . tum . .*, as equivalent to *tum . . tum . .*. Again the It. *qui* 'here,' by its form asserts an identity with the base of the Latin relative. So too in the phrase 'A is as old as B,' the first *as* is a demonstrative, the second a relative; and indeed the Latin would express this by *tam . . quam*. Horne Tooke was of course right when he explained such a form as: 'I know that he is gone,' as equal to: 'I know this, he is gone.' But this being true, we must explain in the same way the use of *quam*, *quod*, *ut*, ὅτι (which in form are all relatives) in the combinations *postquam* (cf. the G. *nach-dem*), *praeter quod* . ., *prout* . ., as well as the particles in: *suadeo ut abeas*, *laetatur quod redieris*, λεγω ὅτι τεθνήκε.

In the same way forms with an initial *s*, appear now as relatives, now as demonstratives. First as relatives, viz. the Gothic *sá-s* 'qui' and *sû-s* 'quae,' noticed by Grimm (D. G. 3, p. 22, § 7), the O. Norse *sem*, Dan. and Sw. *som*; and with these we may include the second element of our own *who-so*, compared with the Latin reduplicate *quis-quis*. Nay in old German *so* was repeatedly employed in this sense, as in the passage quoted by C. F. Becker in his Grammar (Transl. § 130, obs.): *die Güte so sie mir erwiesen haben*, 'the kindness which you have showed me.' But here again the Latin has archaic demonstratives of like form, as *sum sam sas*, used in the time of Ennius, as equivalents for *eum eam eas*. The *s* also stands in our *so* and *such* = G. *so-l(i)ch-er*, and Sc. *sic* (= *thilk*), and in the Gr. *σημερον*, *σητες*. Nay in the Logudoro dialect of the island Sardinia the definite article still in use is, *su m.*, *sa f.*, for the sing., pl. *sos m.* *sas f.* Similarly the S. and Go. have *sa* 'this,' the O. Slav. *si*. To these add both *sic*

'so,' and without the demonstrative enclitic, *si* 'so'; and this not only in the phrase *si dis placet* 'so heaven ordains' (and man has only to submit, though he feels ever so degraded by it); but not very rarely in the old language, where however editors take the liberty of substituting *sic*. My authority for this assertion I give:—

Iube oeti: sei (= sic) si fecerit, gaudebit semper.—CIL. 1447.

Vt quisque exoptet sé* honeste uiuere.—Ib. 1273.

Quid sí t(e) extra aedis éxanimata elíminas?—Enn. ap. Non. 39.

Mé germanam meám sororem in cóncubinátum tibi,

Sí sine dote dédidisse mágis quam in matrimónium.—Pl. Trin.
3, 2, 65.

Si quassante capite tristes incedunt.—Caecil. ap. Serv. G. 1, 74.

Férri tantum sí roget me, nón dem quantum aurí petit:

Sí secubitet, sí quoque a me quáe roget non ímpetret.—Lucil.
ap. Non. 382.

Si mouet ac sinat nares, delfinus ut olim.—Id. ibid. 169.

Nay *si* in this sense seems to be used by Horace (Od. 1, 16, 8), Non Liber aequae, non acuta Si geminant Corybantes aera; nor had Bentley any necessity for substituting *sic* for *si* in (3, 24, 5) Si figit (fixit?) adamantinos Summis uerticibus dira Necessitas Clauos, as *si* itself would have answered his purpose.†

Even the so-called conjunction *si* 'if,' is the same word with the power of a relative; in confirmation of which I may refer to our old use of *so*, in the same sense; as, for example, when Shakspeare says: 'And now, so you will let me quiet go, to Athens will I bear my folly back;' and in the familiar phrase, 'so it please you.' The German too shares or once shared the habit, as seen in the translation of the English Church service: *so* wir sagen wir haben keinen Sünde, *so* verführen wir uns selbst, und die Wahrheit ist nicht in uns; *so* wir aber unsere Sünden bekennen, *so* ist . . . Nay in Chinese *so* is at once a demonstrative

* Here the form *se* is kept in countenance by the variety *nise* for *nisi*; and as regards metre, a strong pronunciation of the aspirate in *honeste* saves the *hiatus*.

† So editors reject: Sicine . . . ? Si . . . ? in Catullus, 77, 3.

(Endlicher's Gr. p. 272 note), a relative (271, § 2), and an interrogative (273, § 2); and now I am in this quarter let me add that *tcè* (270) signifies sometimes 'this,' sometimes 'who' or 'which.'

The substantial identity of form between relatives and interrogatives is too patent to need illustration; and the same may be said of the interrogative and indefinite pronouns. Of this habit *τις τι*, etc., of Greek, and *quis quid* of Latin, are clear examples; and the German *was* is similarly used. Our noun *some*, contrasted with the relative *som* of Swed. and Dan., is another example; and in the Latin *ali-quis* and the Germ. *et-was* the idea of the indefinite is expressed in the second elements alone, for the first part will be found to be merely a numeral, = 'one.'

The forms of the pronouns claim our next attention; and I here commence with the pronouns which have an initial guttural, giving precedence to this form because I believe it to be the original letter. We have already seen the form *qui* in Italian representing the Latin *hi** of *hic* 'here'; and I venture to affirm that Italian in its particle *qui* has preserved the genuine form with more accuracy than the so-called parent language. There is no real anachronism in this theory, for it is well known that at the present day the southern dialects of Italy are softer in their forms, in other words more corrupt than those of the north, and this softer character the Latin may well have had. On the other hand, the Tuscan varieties even in classical times were notorious for the love of gutturals; and the modern Italian is more correctly called 'Toscano.' Hence *guerra* is probably an older form than the Latin *bellum* itself. But as regards the claim in dispute between the initial consonants of the Lat. *hic* and Ital. *qui*, a strong argument in favour of the mute initial is found in the series of forms *cis citra citro citerior citimus*, which as clearly connect themselves with the pronoun *hic*, as the corresponding series *uls ultra ultro ulterior ultimus* with the pronoun *ille*, or rather, to deal with the older form, *olle*. The relation too of *hic hacc hoc* to our own language is itself a sufficient

* This form appears in the sepulchral formula: D. M. S. hi iacet . . . CIL. vol. ii. 3244.

proof that this Latin pronoun once had a guttural tenuis for its first letter; for as our *hither*, compared with *citer-ior*, obeys Rask's law of interchange, so our *he his hence here* ought to be represented in Latin by forms with an initial *c*. Probably the habit of affixing a second guttural in *hic hinc huc* etc. ended in the suppression of that which once preceded. The form *ceteri* too (as I have already noticed), = οἱ ἄλλοι, seems to contain in the first letter what represents a definite article *ci*. But I pass to the other demonstrative pronouns of Latin, and so claim the modern *questo'costi*, and *quello colui*, as more genuine in respect of form than the old classical *iste, ille*.

For the appearance of an initial guttural in the relative and interrogative, it is enough to quote the Sansk. *ka-s*, the Ionic forms of the Greek, as *κον κη κοτερος*, the Lat. *qui, quantus, qualis, quis-quis, qui-cum-que, quot*; while the forms *uter ubi unde ut* are proved to have once possessed an initial *c* or *q* by the compounds *ne-cuter*, old form of *neuter*, *si-cubi, ne-cubi, ali-cubi, num-cubi, si-cunde*, etc.; and even *sicut* and *hucusque* are probably to be divided as *si-cut, ho-cusque*, for such compounds were more probably deduced from the simple forms *si* 'so,' and *ho* 'hither,' than from the secondary *sic* and *huc*. So too *ho-die* might well be preferred to *hoc die*. How an initial guttural may be lost is also clearly seen in the passage of our own relative from such forms as *quhat, quwhere* of old days to the modern *what, where*, etc. Thus a guttural has been exhibited as the initial of the definite article, the three demonstrative pronouns, the personal pronouns, the relative, the interrogative, the indefinite.

P-forms deduced from *K*-forms. This is best seen in the Greek language, where the Attic *πον πη ποτερος* stand by the Ionic *κον κη κοτερος*, etc.; and the same interchange occurs in the Oscan *pis, pitpit, pútúrús-pid*, etc., by the side of the L. *quis, quicquid, (c)uter-que*; also in the Umbrian *pis=quis, svepis=siquis, pisi-pumpe=qui-cumque, pisi panupei=qui quandoque, putro=uter, panto=quantus* (A. K. Wortverzeichniss). Nor is the correspondence limited to pronouns; it constitutes a general law between the two classical languages, as in *οφθαλμος oculus, επομαι sequor, πεμπτος quin(c)tus, πεπτος coctus*. And the same law exists between

the language of Rome and that of the surrounding country, as *columba* 'the tame pigeon,' *palumbes* 'the wild pigeon.' Again in the Keltic family, the Welsh and Breton give a preference to a *p*, where a guttural is preferred by the Gaelic and Erse. Thus in Breton we find the interr. *pe piou pétra* (Legonidec's Gr. p. 71), while *pe-hini* serves as a relative; and the Lat. *quisque*, F. *chaque*, is represented by *pép*. It also possesses an interr. *pti*; and a rel. *pe* 'what,' both rel. and interr., 'which.' So the W. *py*, substantially one with L. *qui*, is used alike as a relative and as an interrogative; while the W. *pan* 'when,' fairly represents the L. *quum* (*cum*).

T-forms from *K*-forms. This change is already familiar in our own language, as in the modern *mate* from an older *make*. Probably there was an intermediate form *kt* with an excrecent *t*, as in *noct-is* νυκτ-ος compared with νυχα, νυχιος, while the Ital. *notte*, Fr. *nuît*, drop the guttural; and it is only for the eye that our own *night* retains the guttural aspirate. But we need not have recourse to inference alone from parallel cases; the old Slavic already exhibits *kto* as the representative of *quis*, which Dobrowsky should not have treated as a compound formed from an interr. *K* and a demonstrative *To*. The Greek κταομαι, when contrasted with the variety παομαι, no one would hold to be a compound. But be this as it may, no sane person will dispute the identity of *τις* and *quis*, any more than that of the two enclitics *τε* and *que*. Hence we have no choice but to unite with the forms which have an initial guttural all the demonstratives with an initial *t*, as S. neut. nom. *tat* 'this,' and all the oblique cases of the same pronoun, which without exception exhibit this initial dental. Add to this the Greek *το* with *του* *της* *του*, etc.; and the same used as a relative; together with adverbs, as, *τοτε* *τοθι* *τοθεν*; and other derivatives, as, *τοσος*, *τημερον*, *τητες*. The Latin also, although not in possession of a declinable pronoun so beginning, has the adverbs *tam*, *tum* (*tunc*), together with *tot*, *tôtus*, *talis*, *tantus* and *ta-men** 'with all this,'

* Bopp (§ 343) would identify *μεντοι* with *tamen*; and so far he is perhaps right; but not when he goes on to say that *μεν* in this word is the familiar particle *μεν*.

where the postposition *men* is one probably with *μετα*, and G. *mit*, and consequently with our *with*. *Tandem* has already been spoken of, as a compression of a fuller *tamen-dem*. We also have preserved the simple pronoun *to* in our *to-day*, *to-morrow*, *to-night*, and in the obsolete *to-year*. It seems somewhat strange that Koch in his Grammar of the English language should identify the *to* of these compounds with the E. prep. *to*, G. *zu*, in spite of what is seen in the S. *a-dya*, L. *ho-die*, Gr. *τημερον*, *σημερον*.

TH in place of *T*. This is best seen in our own language, where the change is in accordance with Rask's law, so that *the*, *this*, *that*, *there*, *thence*, *thither*, *than*, *then*, *thus*, and the provincial *thilk* for *such* (as *quwhilk* for *which*), leave no room for doubt.

S for *TH* or *T* is no less certain. First we have the evidence of the S. n. m. *sa*, f. *sá* by the side of forms with *t*, and so corresponding to *ὁ ἡ*, the aspirate of which is the habitual analogue of an initial *s* in kindred tongues. So too the Gothic has for the nom. m. *sa*, f. *so*, by the side of forms with an initial *th*; and the A.-Sax. again in like manner for the so-called definite article gives us *se sunu* 'the son,' *seo dóhtor* 'the daughter,' but *pæt cealf* 'the calf.' Add to these the L. *sic*,* our own *so*, *such*, G. *solcher* (= *so-lich-er* and L. *ta-li-s*); the G. *sie*, with the several meanings of 'she' 'her' and 'they'; and, to return to the Greek, *σημερον* and *σηρες*. In fact we have here only cases identical with the common habit of lisping, which led to the Greek varieties *Ασαρα* = *Αθηνη*, *σιος* = *θεος*, etc. *Sh* for *s* on the same principle is to be expected; and hence Lith. *szittas* = *οἶτος*, and our own *she*.

D in German for our *TH*, as in *der die das den darein doch* etc., needs no comment beyond a comparison with *du* 'thou,' *durch* 'through,' *dünn* 'thin,' *dick* 'thick.'

The *W* so common in English pronouns has already been pointed out as a corruption of *quwh* in *quwhat*, *quwhilk*, etc. The change corresponds pretty nearly to our *war* as contrasted with

* I should here have to add the reflective pronouns, *sui se sibi*, Go. *sis sik*, etc., if I could accept the doctrine of Bopp as given in V. G. § 341: Hinsichtlich der Umschlagung der reflexiven Bedeutung in die demonstrative, die wir bei *sva* 'so' annehmen, berücksichtige man dieselbe Erscheinung an dem lat. *si-c*, dessen Zusammenhang mit *sui*, *si-bi*, *se* man nicht bestreiten kann.

guerra, and our adv. *well* for *gwell* by the side of *good*; and the same or nearly the same applies to the G. *wer* and *welcher*.

The *H* of ὅς ἦ ὁ, ὅθεν, ὅτε, and the article ὁ ἦ by the side of the oblique cases with a *τ*, and indeed the Doric nom. τοῖ ται, is no doubt only a weakening of the original *K*-sound, as in the L. adv. *hic* contrasted with Ital. *qui*. The def. art. of the O. Norse *hinn hin hitt* follows the same rule. We also in pronunciation drop the *w* of *who*, *whose*, *whom*, and even for the eye in *how*. The appearance of a mere *h* in *he*, *his*, *him*, *hence*, *here*, *hither*, has already been mentioned as required by Rask's law where one of the classical languages has or had a *k*-sound. Similarly the Welsh supplies a m. *hwn*, f. *hon* for 'this,' and also has *hi* for 'she' or 'her.'

Initial *Y*. As the passage from a guttural to a *y* is familiar to us in our *yolk*, *yellow*, *yeast*, *yesterday*, we have only what is reasonable in our *yon*, *yonder*, and G. *jener* by the side of *κενος*.

But in many forms all trace of an initial consonant is lost. In the most marked instance, viz. L. *is ea id*, it has been already shown that *h* once belonged to the word; and the same was said of our *it*. Of course the G. *er* 'he,' *es* 'it,' must go with these. So too the O. N. *hinn hin hitt* drop the aspirate, when attached as enclitics to a noun, as *svein-inn*, *bót-in*, *skip-it*. Add the S. *atra* 'here,' *atas* 'from here,' together with S. *a-dya* 'to-day,' Erse, *a-nochd* 'to-night,' O.s. *a-bon* 'to-day,' which I take from Bopp (V. G. § 366). Our old writers also in imitation of the speech of the vulgar often exhibit *a* for *he*, as in the 'Taming of the Shrew' (5, 2): '*A* has a little galled me I confess'; and again (5, 1): 'I believe *a* means to cozen somebody.' But the pronoun *as*, alike as a demonstrative and as a relative adverb, belongs to polite speech. Nay in the combination *such as* the latter word is a true relative; and in 'Him as prigs what isn't his'n,' we must not discard from view the use of *as* for 'who,' because it happens to be condemned as vulgar, for it cannot be too often repeated that it is but an accident that one form has gained the day over another in the battle for life between words. I therefore also put in a claim for the form 'em as abbreviated in conversation for *them*. The Greek *εἰ* 'if,' as contrasted with the

Latin *si*, is another example of the lost initial consonant. I conclude this branch of the discussion by repeating that all the varieties in the initial consonant of the said pronouns grew out of a guttural.

I next deal with the final consonant of the leading syllable, and commence with the nasal (*n* or *m*), as being at once of the most frequent occurrence, and in my belief the original letter. Thus for the definite article in Swed. and Dan. we have *den m.* and *f.*, with *en* as a suffixed article, *den patriot* or *patriot-en* 'the patriot,' *patriot-ens* 'of the patriot,' *den fru* or *fru-n* 'the woman,' *fru-ns* 'of the woman.' And we ourselves have the form *then*, somewhat concealed by provection in the form *for the nonce*, in place of *for then once*. In this example the word plays its proper part of a demonstrative. Dr. Guest (Proc. of Phil. Soc. i. p. 290) quotes from Robert of Gloucester several examples of *þen*, where we now say *the*, as: and bysegged *þen* castle syx wouke (97). Here and in five of the six the word appears as an objective; but he adds: Sometimes however we find *then* as a nominative; e. g. 'þer was aslawe *then* hende kynzt, þe noble Syre Waweyn.' Then for demonstratives in other of the allied languages we find a nasal, as in *κεινος* (*κεν*), in the Doric *κηνος* and *τηνος*, Goth. *jain-s*, Germ. *jen-er*, and our *yon*, with the derived *yond-er* (*d* excrement) and *beyond*; also in the Slavonic pronouns, as *on ona ono* 'that' of the O. Slavic., the mod. Russ. *tom* 'that, the'; the Bohem. *ten* or *sen*; Upper Lusatian *ton* or *to*. Again our own adverbs, *hence thence whence*, were once written *henn-es*, *thenn-es*, *whenn-es*, and so betray their genitival origin, leaving *henn*, *thenn*, *whenn* for the base of the several words. Similarly, in *inde* and *unde* *in* and *un* alone are radical, the *d* being excrement, and the final *e* probably represents a genitival suffix, *us* or *is* (cf. *ipse* from an actual *ipsus*, *iste* from *istus* (Pl. Glor. 4, 6, 18), and *ille* from a theoretic *illus*). This theory about the final *e* receives strong confirmation from the corruption in Greek of *προσθεν* to *προσθε*, etc.; and this reminds me that the Greek *ενθεν*, which is the analogue of *inde*, is also a witness for us, whether the division of the word be as commonly taught *εν-θεν*, or as I believe *ενθ-εν*, where the dental aspirate *θ* is an outgrowth from the dental

liquid. Even Bopp holds the *v* in the first syllable of *εvθεν* to be Ureigenthum des Stammes (V. G. § 373). What has been said of *inde* and *unde* also applies to the corrupt forms *hinc*, *illinc*, *istinc*, for setting aside the enclitic *c* (*ce*), these represent lost forms, *hinde*, *illinde*, *istinde*, as shewn by *utrīm-que* in place of *utrīndeque* from *utrīnde*. For the compression of the assumed *hinde*, etc., to *hin*, etc., compare *deinde*, *proinde*, *exinde*, cut down to *dein*, *proin*, *exin*. Precisely in the same way our own old form *henn-es*, as just quoted, and its variety *henn-en*, led to a corrupt variety *hen* (= *hence*, see Essays, p. 167); while the German has *hin*, and the French from *inde* has deduced the particle *en*. Nay Terence treats *inde* as a monosyllable, *i. e.* as *in*, in Phorm. 4, 3, 76: *Inde* (so Bemb., others *id*) *sūmam*: *uxori tibi opus esse dixero*. In what has been just said of the Latin *inde* it was assumed that *in* is the base of the pronoun *is ea id*; but this is a point that has already been discussed in the twentieth chapter.

The personal suffix *τιν* of *εσ-τιν* 'he is,' also exhibits an original nasal in a third-person pronoun; and *οντιν* of *λεγοντιν* (*λεγουσιν*) I divide (see above) as *οντ-ιν*, of which I hold *ον* to be the pronominal base, *τ* to be an outgrowth from the preceding *ν*, and *ιν* a suffix of plurality = E *-en*. Again in O. Norse the personal pronoun runs for the m.; N. *hann*, ac. *hann*, g. *hans*, d. *honum*; and for the f.: N. *hán*, ac. *hana*, g. *hennar*, d. *henni*; in which it is at once seen that an *n* belongs to the base of the word (Rask's Gr. transl. 94). So again the Finn carries *hán* through all the cases of the sing., as n. *hän*, g. *hän-en*, etc.: nor let it be inferred that this pronoun is for the Finns a loan-word from their neighbours, for pronominal words are always of home-growth. The northern dialect of the Lapp also has n. *sodn*, g. *sun*, d. *sunji* (Fiellström' Gr. p. 39; comp. Rask's Lapp. Gr. 79). The Gothic too betrays the nasal in the several pronominal datives, *im-ma*, *tham-ma*, *hvam-ma*.

But our own language must not be left out of view. Let me once more quote a sadly vulgar distich: "Him as prigs what isn't his-en, when he's cotched must go to prisin," where *him* is doing duty as a nominative. But for some such justification of this use of *him* in the old language, Skakspere, as Dr. Guest

implies (Proc. Ph. Soc. vol. 1, p. 290), would not have ventured upon constructions like: "Him I accuse the city gates by this has entered" (Coriol. 5, 5), or: "When him we serve's away" (Ant. and Cl. 3, 1), where the little word performs the double office of object to one verb and subject to another. An unmis-takable nom. is seen in: "Damned be *him* that first cries, 'hold, enough'" (Macb. 5, 7). Again that the *m* of *him* really belonged to the base of the pronoun is established by the form *himself*, which is shortened no doubt from *hims-self* (and indeed *his-self* still lives in provincial dialects), so that the first part is a genitive or possessive, and so corresponds with *my-self*, *thy-self*, *her-self*, *our-selves*, *your-selves*. Again take such a phrase as: "I knew my cousin Roger well, and you are not *him*," from the mouth of an educated lady, talking in natural English, not corrupted by the dogmas of Lindley Murray. From the Keltic stock I may quote the W. *hwn* m., *hon* f. 'this'; and without variation *hyn* 'this' or 'these,' together with *hwnw* m. *hono* f. 'that,' and *hyny* 'that' or 'there.'

The interrogative and relative may be taken together. As I have already claimed *in* as an earlier crude form of the Lat. pron. *is*, on the strength of the word *Is* in an inscription, so I now venture to claim *quin* as an old crude form of *quis*, and this first of all on the evidence of the Greek *τις τινος*; but also on the evidence of Terence (Eun. 2, 3, 62): "Quis est tam potens cum tanto munere hoc? Milés Thraso" (for so the MSS.); and again of Cicero, who begins his speech against Piso with a quotation from an old poet: "Pro dii immortales quis hic illuxit dies?" for Quintilian (9, 4, 76) found here a verse, meaning of course an iambic senarius. So also Diomedes (464 P.; 468, 10 K.). It is true that our MSS. of Cicero and Diomedes give *qui*, not *quis*; but *quis* is the reading of Caesarius in the Köln edition of Diomedes, 1533, as also of old editions of Quintilian; and this reading, if it be but a conjecture, is simpler than Spalding's conjectural insertion of *nunc* after *hic*. Again Varro (l. l. 6, 7) has: "Aenea quis est qui meum nomen nuncupatur?" for so every MS. but one, which has the impossible: "Aenea quis enim est meum nomen nuncupatur?" But to leave classical for modern

times. Starting eastward from the Atlantic we have *quem sabe?* 'who knows?' in Portugal; in Spain *quien sabe?** Again from Dr. Guest's paper (ib. p. 287) I quote the Sw. n. *hvem*, g. *hvems*; Dan. n. *hvem*; Fris. g. *waems*; Dutch g. *wiens*; as also in connection with our own language (p. 289): "Sir by my lewte I the pay (pray), The sertan soth that thou me say Wheym is this faire lady" (Senyn Sages, 3271); and again: "Tell me in sadness whom she is you love" (Rom. and Jul. 1, 1). To these Dr. Guest adds *tham* as a plural relative in R. Br. 52: 'Alfred and Edward, tham of Eilred kam, Wer with Duke Roberd.' The Greek *τιν* of *τις τιν-ος*, as I have already noted, has also preserved the nasal. Then as *quin* is the old form of *qui*, so *qui-cum-que*, which like *quisquis* is made up by a repetition of the relative, owes the nasal of the middle element *cum* or *cun* to this source. Similarly our *who-so* must have originated in a form *who-som*, on the evidence of the so-called vulgar *how-som-ever*; and indeed the Swedish *som*, as already noticed, is in habitual use as a relative. Hence too our indefinite *some*. I have already asserted the identity of the two Latin words *si* 'if' and *si* (= *sic*) 'so,' the first used with the power of a relative, the second with that of a demonstrative. But *si* had also the form *sin*, and, as usual, where two forms coexist, I give a preference to the fuller as the more genuine. I am aware that in the view of some *sin* is a compound form, meaning 'but if,' and so only to be used after a preceding *si*, but both these assertions are groundless. Plaut. Merc. 5, 2, 49 (S. Bergk's Beitr. 120) has: 'Eu. Pótin ut animo síis tranquillo? Ch. quíd sin (sint B C D) animus flúctuat?' So Lucil. ap. Non. p. 311, Gerl.: 'Quod sin ulla potest mulier tam corpore duro Esse tamen . . . (so Luc. Müller Jahrb. f. class. ph. of 1868, p. 493; MSS. si nulla); Péream sin umquám fatiscar fácere quod quibó boni,' ap. Non. pp. 211 and 326. So again L. Müller, MSS. 'uereor si nunquam.' Further that *sin* means simply 'if,' and not 'but if,' is shown by the combination *sin autem*, the *n* being uniformly preserved here because of the following vowel; as also by the words of Valerius Flaccus (5, 667), 'Quod sin ea Mauors abnegat . . . Ibis indecores.'

* The Sard *chimi* too is alike an interrogative and relative.

No doubt this limitation of *sin* to a second or third place eventually became a law of the language; and indeed it is but natural, that when a word is repeated, it should be pronounced with increased emphasis, and so in its fullest form; but in early times the use of *sin* must have preceded that of *si*; and hence in Terence, Ad. (3, 5, 4) I would read: '*sin* ést, facturus út sit officiúm suom,' rather than: *si ita est* . . . with Dr. Wagner, or *si est is* . . . with Fleckeisen, the MSS. having simply *si est facturus*. From the Sanskrit it will be enough to quote the form *kim*, which is the acknowledged 'dhātu' of the interrogative, and by its final *m* has long been a stumbling block to Sanskritists. Somewhat strangely the same form *kím* or *kim* with a variety *kih* serves as both interr. and rel. for Turkish (David's Gr. pp. 25, 26), thus again justifying my excursion into the Tatar family of languages; and still further to fortify me in this boldness there occurs the twofold evidence of the Finn (Vhael, pp. 48 and 54) with its interrogatives *cu-ca* and *ken-kä*, gen. *ken-en*, of which the forms *cu* and *ken* form the base. Nay *cuin* itself (p. 42) is a Finn relative, so that we have what is identical with the prototype *quin* of Latin. Again, in the same language, from *cu* comes *cu-mpi* 'uter,' where the Finn, like *uter* itself, has a suffix of comparatives, as shown by the adj. *musta* 'black,' *mustempi* 'blacker.' Of the two forms of the theme *cu* and *ken*, I of course give a preference to the fuller, and I wish this *ken* to be kept in especial remembrance. So also the Mongolian has an interrogative *ken* with the sense of *wer*? *welcher*? (Schmidt's Gr. p. 44, § 69). Thus I have traced our pronoun with an initial guttural and a final nasal from the Atlantic to the Pacific, and from the Mediterranean to the Arctic Sea.*

* In the adverbs *quum* (*cum*), *tum*, etc., and our *when*, *then*, etc., it is an ordinary assumption that we have accusative forms, whereas a more legitimate doctrine is that these words contain only the stem of the pronoun, the suffix once attached to them having in course of time been rubbed off. Thus *cume*, in the sense of *cum*, is quoted by Terentius Scaurus, col. 2261 p from a carmen Saliare. With this *cume* Hainebach (program. of Giessen, 1867; cf. Rhein. Mus. 26, p. 130) justly compares the Umbr. *pune* and old Germ. *whanne* of like power. We have probably then in these three words a dative suffix of the

But the nasal itself is liable to many changes, as first with its neighbour liquid *l*. This is seen in the Latin *ille*, or rather *olle*, Ital. *quello*; and it is well known that a love of the liquid *l* is a marked characteristic of these two languages. Indeed as *sol* to our English *sun*, so or nearly so is *il* or *ol*, or perhaps combining these, *iol*, to our *yon*. Hence as the Roman from this pronoun deduced the forms *uls*, *ultra*, &c., so from *yon* comes our preposition *beyond*, and our comp. *yond-er*. Again the Sansk. *anya*, akin to our *an*, *any*, and *one*, has for its Latin analogue *alio-* (*alius*). But the most perfect parallel is found in the Turkish pronoun (David's Gr. p. 23) nom. *ol* or *ô* 'il elle lui,' g. *ânûn* (or *ónoûn*) d. *ânâ*, ac. *ânî*, abl. *andan*, etc.

As *n* and *l* are alike interchangeable with *d*, we must admit the Sicil. *queddo* and Sard. *cuddu* as one with Ital. *quello*. But the Latin seems also to have an allied word in that strange form *cedo*, with a plural *cette*, 'give' or 'tell.' This ^{cedo}in use seems to be a verb, but in form has little resemblance to this part of speech. Probably it was at first an adverb with the meaning of *huc* or *hoc* 'hither,' 'this way;' and if so, the *o* of *cedo* for *cen-o* though short, will have been at the outset long, as *o* of *hoc*, *illo*, *isto*.

Another change from the dental liquid is to the dental mute *s*, one of such frequent occurrence in the Greek language as, e. g., to repeat what has been said, *σῶφρον-σῶφροσυνή, φαν-ω φασμα, σβεννυμι ασβεστος, ἐννυμι εσθης* (*uestis*). It may be that the change starts from the addition of an excrescent *σ* to the *ν*, which leads to the absorption of the nasal, as in the series *χην*, Germ. *gans*, Engl. *goose* with a long vowel, and thence *gosling*

time 'when,' as in the Lat. *here* (*heri*), *mane* (*mani*); just as we find a genitival suffix in our old *whenn-es*, *thenn-es*, *henn-es*. Again the form *sin*, which was just now under discussion, on the same principle must have contained something more than the base of the pronoun. Here too a datival suffix would be acceptable, if we may judge from the Greek form *τῷ* 'so,' 'in this wise.' Now *sin* having a long vowel may well have grown out of a fuller *sin-in*, the two like syllables in the usual way having led to a single syllable with a long vowel; and *in* has already been claimed as a datival suffix in an older form than the ordinary *i*.

with a short *o*; but for us the fact is enough. Hence *is-to*-, *ques-to*, the last syllable of which will be considered below.

Hence too, as I have already said, in the declension of the Sanskrit n. *sa*, ac. *tam*, a truer division than that commonly put forward (Bopp, V. G. § 349), would allot the *s* to the base in the m. ab. *tas-mât*, g. *tas-ya*, loc. *tas-min*, f. d. *tas-yâi*, ab. *tas-yâs*, g. *tas-yâs*, loc. *tas-yâm* (add the corresponding forms of the S. interrog. beginning with *kas*), for the suffix *mât* agrees with that of ordinary nouns, while that of *tas-ya* would correspond with the Homeric *λογο-ιο*; and lastly, *min* is the form I have claimed as original for the dat., cf. *σθηθεσ-φιν* and the Latin *nobis* for *no-bin-s*. On the other hand, such an assumed 'dhātu,' *tas* for *tan*, receives confirmation from the *tan* of the Zend in several of the cases of the fem., as assumed by Bopp himself (§ 349), viz.: ac. *tañm*, d. *tañhâi*, ab. *tañhâd*, g. *tañháo*. Lastly, the *s* of the German *es*, *was*, *das*, and of our *as*, whether used as a relative or mere adverb, I also hold to be a representative of an original *n*, but of this more presently. To these add *us-que*, *us-quam*.

So too the Umbrian dat. *es-me* or *es-mei* of the demonstrative (A. K. p. 133), and *pus-me* of the rel. and interr., seem to claim an *s* as part of the theme. Nor would I reject with contempt our vulgarism *his-en*, in which, as *en* is a good genitival suffix, so *his* may well represent the base.

To this I have further to add from the old Slavic the interrog. forms *chis-o* or *chës-o* 'cuius,' together with the gen. *chiso-go* or *chëso-go*, dat. *chiso-mu*, *chëso-mu*, which Bopp, § 269, quotes from Miklosich, though his views as to these words differ from mine.

Of course the *s* of the German pronouns just quoted is represented by the *t* of our own *it*, *that*, *what*, the n. *kat* 'quid' of the Vedas (Bopp, § 39), and Scand. *hit* and *et*; as also by *d* of the Latin *id*, *quid*, etc. A form *kat* for the neuter of the Sanskrit interrog. is also assumed theoretically by Bopp, § 385, and held by him to be confirmed by the Zend *kad*; and the S. *kach-chit* he considers to be a euphonic variety of a lost *kat-chit*. This suffixed *chit* again is regarded by Bopp as the analogue of the Lat. *quid* (§§ 390 and 399). But here I am stopped by the

doctrine commonly put forward that in the *s* and *d*, of such words as *es*, *was*, *it*, *what*, *id*, *quod*, etc., we have a neuter suffix. But I meet the objection first by the argument that a suffix to define negation, and the word neuter only means the negation of masc. and fem., is in itself an improbability. Secondly, I point to our own *that* and *what*, which are in common use in connection with masculine and feminine nouns, as *that man*, *that woman*, etc. Thirdly, Bopp himself in § 399 speaks of a masc. pron. *kaç-chit* 'irgend einer,' and in § 397 he says: The Sanskrit *chit* loses all consciousness of its neuter case-ending, in which it agrees with the Latin *quid*, and so by an abuse runs beyond its just limits to the masc. and fem., *kaç-chit*, *ká-chit*, and indeed through all the cases. It will probably be thought that in the Gothic neuters *ita*, *thata*, etc., we have indisputable evidence of a neuter suffix; but the just explanation of these forms is, I believe, that we have in them traces of the definite declension of adjectives like *mikilata*, *blindata*; and as such declension at bottom consists in the addition to the ordinary adjective of a definite pronoun, *i-ta* and *tha-ta* will be only reduplicate pronouns, corresponding in fact to the Greek *τον-το*. In this use of the suffix in *ita* and *thata* the original power of the suffixed article is retained; and indeed it is only by an abuse that it was ever lost for the Gothic adjective as *mikilata* and *manvjata*, Mark 14, 15; *háuhtata*, Luke 4, 5; *ninjata*, Matt. 9, 17; just as the modern Russian also now uses what in origin was a definite adjective as a simple adjective (Bopp, V. G. § 286, p. 11).

Thirdly, as I claim the *t* of *it*, *what*, *that*, to be the representative of an original *n*, so also I deal with the same *t* in *ut*, *ut-er*, *κοτ-ερος*, *ποτ-ερος*, and S. *kat-aras*. Add *citra*, *citro*, *citerior*, *citimus*.

But a *t* is apt to interchange with a *th*, and a *th* is a favourite both with Greeks and Englishmen. Hence I am no way surprised to find in old English forms, such as *heth-en*, *wheth-en*, *theth-en*, by the side of *henn-en*, *whenn-en*, *thenn-en*, where we now prefer *hence*, *whence*, *thence*; as well as *wheth-er* corresponding to *ut-er* and *κοτ-ερος*. Again in Greek we have not merely *ποθ-ει*, *ὀθ-ει*, *τοθ-ει*, but by the side of these *ποθ-ι*, *ὀθ-ι*, *τοθ-ι*. Το θατεροι,

I would divide as $\tau\theta$ ἄτερον, where however the θ is largely due to the aspirated vowel which follows; and this division agrees with Bopp's doctrine (§ 155) that the Greek $\tau\omicron$ must originally have had the form $\tau\omicron\tau$ or $\tau\omicron\delta$; I would rather say $\tau\omicron\nu$.

So far the interchange has been of dentals with dentals; but s between vowels readily passes into r ; and hence from *das*, *was*, the G. *dar-um*, *war-um*, *dar-ein*, *war-ein*; to which our *there-in*, *where-in*, etc., correspond. So the Welsh definite article is *yr* (for *yn*), corrupted to *y* when the following noun begins with a consonant. The enclitic $\pi\epsilon\rho$ is no doubt of pronominal origin and so probably akin to $\pi\omega s$, $\pi\omicron\nu$, etc.

Lastly, the final consonant of our pronominal prototype often disappears altogether, as in our own *the* for *then*, *he* for *hen*, *who* for *whom*, *so* for *some*; Lat. *qui* for *quin*, *i* (*is*) for *in*; Gk. $\tau\iota$, \acute{o} of $\acute{o}s$, and \acute{o} , η , $\tau\omicron$, the neut. $\tau\omicron$, as has been just observed, for $\tau\omicron\nu$ or $\tau\omicron\tau$, S. *ka*, *ki*, and *ku*, etc.; *sa*, *sá*.

From this somewhat tedious survey I hold it to be a safe inference that the form *ken* is entitled to precedence, both because of its own prevalence, and from the facility with which all the varying forms flow from it. The next question is what is the first meaning of this form so used; and here I part company altogether from the German school of Bopp and his followers. 'The main principle of Word-building,' says Bopp (§ 109 *a*, p. 203), 'appears to me to lie in the union of verbal and pronominal roots, which together constitute the life and soul.' This doctrine of pronominal roots has also the sanction of Prof. Max Müller in his first series of Lectures (p. 272, etc.), who employs however a slightly different nomenclature. For verbal he substitutes predicative, for pronominal demonstrative roots. Thus he says: 'if they (our primitive ancestors) wanted to express *here* and *there*, *who*, *what*, *this*, *that*, *thou*, *he*, they would have found it impossible to find any predicative root that could be applied to this purpose.' And again, he says, 'we must admit a small class of independent radicals, not predicative in the usual sense of the word, but simply pointing, simply expressive of existence under certain prescriptions.' Now 'impossible' is a strong term; and had the writer thought a little more of the meaning of his own

terms 'demonstrative' and 'pointing,' he might well have arrived at a different conclusion. When we use the words *this* and *that* in reference to material-objects, they would be of little service, unless the finger also aided by pointing to the object; and so they are justly entitled demonstratives; but it is not enough to point, until we call the attention of the hearer to the direction indicated by the finger. Hence some imperative in the sense of 'look' becomes all but a necessity. Precisely in the same way for the due working of the electric telegraph the announcement by a bell is required to draw the attention of the deciphering clerk to the coming movement of the needle. Thus, before we talk of impossibilities, the question should be asked whether language in its use of so-called demonstratives has any vocal symbol which conveys the idea of 'look.' Now an Englishman, when he asks himself this question, may well have his attention drawn to the old verb *ken*, now all but obsolete for us in the south of the island, but still full of life for a Scotchman. We have also the verb *con* 'learn,' whence the word *cunning*, at once an adj. or participle and an abstract substantive, originally used of knowledge generally, and not limited as now to 'slyness.' If it be objected to this idea that our English language is of too modern a character to supply an origin for what belongs to the oldest elements of the Indo-European family, my first answer is a demurrer, in as much as the roots of our English are as old as those of Greek or Sanskrit; but I have also a second answer, that this same root will be found in all the members of this great family, and indeed in other quarters which are usually regarded as lying beyond its limits. First of all I look at the Latin and Greek vocabularies, and seeing that our *ken* or *con* has supplied us with a secondary verb *k(o)now*, which stands to them in the same relation as *bellow* to the older *bell* (like a bull, etc.), Germ. *bell en* 'bark,' I have at once before me the familiar *nosc-o* (old form *gnosce-o*) of the one language and γιν-ωσκ-ω of the other, from a lost root *gon*, which in obedience to Rask's law exhibit a *g* in place of our *k* (*c*); and this simpler stem, *gon*, accounts for the form of the compound participles *a-gn-itus* and *co-gn-itus* for *a-gou-itus*, etc., whereas from *agnosco cognosco* must

have been deduced forms, *a-gno-tus co-gno-tus*, corresponding to the simple participle (*g*)*notus*. In the English *know* and Latin *gnosco*, *gnotus*, *gnomen* (cf. *a-gnomen*, *co-gnomen*), the guttural ceased to be sounded, and finally in Latin ceased to be written. Hence we can scarcely be surprised that it should have disappeared from the L. (*go*)*n-ōta*, Greek (γ)*νομα*, and the Welsh *enw*. The Latin so-called adj. *catus* too, 'knowing,' 'shrewd,' has much of the character of a participle, especially when we compare it as to form with the Greek nouns compounded with *φατος* from a verb *φεν-ω*. But the root is also found in two fragmentary forms, *ce* and *en*. The first of these is attached exclusively to words of a demonstrative character, for Dr. Donaldson's *is-ce*, *eius-ce*, are wholly without authority; whereas for demonstratives this particle is a thoroughly appropriate suffix. Even the mutilated form which it assumes in *ce* has its parallel in the curtailment of *ue*, when used enclitically, from the fuller *uel*; and again the Homeric *κεν* at times, when degraded to an enclitic, also drops its *v*. On the other hand the loss of the initial guttural in *en* 'behold,' agrees with what has just been seen in the several forms *nosco*, *nōta*, *ovopa*, and *enw*. But I pass to the all-honoured Sanskrit, where I find the reduplicate vb. *chi-ket-mi* 'I see,' the root of which Bopp himself identifies with the Skr. vb. *chit* 'perceive,' 'know,' and this again with the Zend vb. *chin* (§ 109, b 2, p. 239 note). Thus the change from *n* to *t* is no difficulty for Bopp, and is in agreement, as already noticed, with the form of *cit-ra*, *cit-ro*, etc. Then on the Keltic side, from Mr. Whitley Stokes' edition of the Middle-Cornish poem 'The Passion' (Trans. Phil. Soc. 1866, p. 94), I learn that the Cornish has a vb. *gon* 'know,' and the O. Erse *gen* 'know.' To these I add from the Lith. a so-called particle *kat* 'see there' (Nesselmann's Lex.); while Bopp himself (§ 87, 2) supplies me with the facts, which, for one who does not accept the German doctrine as to the limits of the Indo-European family, are valuable, that in the Philippines there still survives the verb *quita* or *kita*, in Maori *kitea*, in Malagash *hita*, all signifying 'see.' But even these limits are not sufficient for me. The first paper which I wrote on the present subject was read before the

Philological Society on the 26th of March 1847. At the next following meeting Mr. Guest (now Dr. Guest), who had not been present at the reading of my paper, favoured the Society with a paper of his own on the Chinese language, in which he pointed our attention to the Chinese vb. *ken* 'see,' and also deduced from such a root the Danish pronoun *han*, signifying 'this,' a view, which, as formed independently of my own, was for me a strong confirmation. Thus, as I seem to myself to have established for the pronoun *ken* and its varieties an area which extends from the Atlantic to the Pacific and from the Mediterranean to the Arctic Sea, so I have now given reasons for assigning to the verb *ken* 'see' and its analogues even a larger area.

It is here then assumed that *ken* as the base of the pronouns was an imperative mood with the idea of 'look.' As to form *kene* would have been better suited; but the loss of the final *e* would be in agreement with *fac, dic, duc, es, inger*; and indeed if we start from a form *con*, the *e* in the first syllable of *kene* and *ken* may be due to 'umlaut,' as ^u*ucl* 'or' for *uele* 'choose' from *uolo* (cf. *uelim, uellem, uelle*). But a graver difficulty arises in the question, what right *hic iste ille* etc. have to the process of declension, if they were at the outset imperatives of a verb? To this my first answer is a reference to what has befallen the form *ecce* 'behold.' This probably the most timid will allow to be an imperative, with which its form and meaning alike agree. Yet in the time of Plautus the language had accepted such constructions as: *Atque eccam eampse Ante aedes . . . uideo*, Pl. Men. 5, 2, 22; *Atque eccum lupum in sermone*, St. 4, 2, 3; *Ubi tu es? Eccum*, Glor. 1, 1, 25; *Assum apud te, eccum*, Poen. 1, 2, 67; passages which abundantly prove that *eccum eccam eccos eccas* are not always compressions of *ecce eum* etc.

And in fact the process of declension was extended to many forms which in their origin had no title to it. The prepositional constructions *pro consule, pro praetore*, when added to a man's name served to denote his office; but after a while it was found convenient to decline them as n. *proconsul propractor*, g. *proconsulis propractoris*. In the same way *M. Antonius triumuirum* (*trium uirum* = *trium uirorum*), as (one) of three commissioners, is

of valid construction; but again there was a convenience in a declinable form, *triumvir -ri*. So *sestertium*, strictly a gen. pl., was treated as a neut. nom. and so declined. The gen. *cuius* by its final letters tempted the Romans to a declension like that of *bonus a um*; and no doubt the possessives *meus tuus suus noster uester* were acceptable errors growing out of the mere genitives *mei tui* etc. Again the noun *proportio* of late Latin was due to a forced declension of the combination *pro portione*. We ourselves have taken the same liberty with *omnibus*, giving it a plural *omnibusses*, or better still *busses*; nay sometimes one hears from a semi-learned quarter, a plural *omnibi*. Add to these that from *vice-regis* we have deduced both *viceroys* and *viceroys*.

I propose next to deal with the meanings of the several classes of pronouns as explained upon the theory that they originate in such a form and construction as *ken* 'look.' Now the demonstrative pronouns, as we have already said, at once take a definite meaning, if so interpreted; and it is now seen that *hic*, applied to objects that are near, and *ille* to distant objects, may well be of one origin, and obtain their distinction from the different direction of the pointing finger. No better examples of the advantage which follows from the translation of these pronouns by 'look' can well be found than in: *Luciscit hoc iam* (Plaut. Amph. 1, 3, 45, and Ter. Haut. 3, 1, 1), 'it is getting light, *look*, already'; and Vergil's (Aen. 5, 457):

Praecipitemque Darén ardéns agit aequore toto,
Nunc dextra ingeminans ictus, nunc ille sinistra.

Now with his right redoubling blows, now *look look* with
his left.

The extension of demonstratives to a use as relatives involves a question of greater difficulty, but one not insuperable. I would first point out that alike in Greek and Latin the older construction was to place the so-called relative clause before the other; so that there is something unhappy in the term antecedent, and in those of prepositive and postpositive articles. But the whole theory of grammar takes form only when language has arrived at an advanced stage; and consequently the terms adopted for it are

often out of keeping with the original state of things. It is in this way that the name 'preposition' has established itself exclusively for the two classical languages, and it seems something strange when we find ourselves compelled to speak of postpositions, when we deal with the Tatar family of languages; and indeed with the Latin also in reference to such combinations as *mecum*, *quatenus*, *quamobrem*, *qua de re*. All admit that secondary clauses headed by a conjunction for the most part take precedence of the main clause; and indeed the terms 'protasis' and 'apodosis,' as used by grammarians, are formed upon this theory; but conjunctions are but forms of the relative. In support of the fact that in the old Latin language precedence was commonly given to a relative clause, it is enough to look at any of the older documents. Thus in the Consular decree about the boundary line between the Genuates and Viturii (CIL. 199, l. 6) there occurs the phrase: *Qua ager priuatus casteli Vituriorum est, quem agrum eos uendere heredemque sequi licet, is ager neetigal nei siet*. Again (198, 14) *quos legerit, eos patrem tribum cognomenque indicet*. At the beginning of the *Phormio*, we have: *Quoius tú fidem in pecúnia perspéxeris, Vérba* uerere ei credere?* (v. 60); *In quo háec discebat lúdo, exaduorsum éi loco . . .* (v. 88); *Lex ést ut orbae qui sunt genere próximi His núbant* (v. 125); *quod fórs feret ferémus* (v. 138). So in the first scene of the *Andria* we find clauses which thus begin: *quod habui . . .* (v. 39); *quas credis . . .* (v. 47); *quod plerique . . .* (v. 55); *cum quibus . . .* (v. 63); *Nam qui cum ingeniis . . .* (v. 93). Moreover this order of words grows out of the order of thought. Before we express a proposition on any subject, it consorts with clearness of ideas to define that subject. Secondly, it is conducive* to clearness of ideas, where that which is spoken of is

* The MSS. have *Verere uerba*; but emphasis claims the order given above, nor does the metre suffer, and this I affirm on two grounds: first that the *a* of *uerba* may be long in an old writer, and secondly that a trochee at the beginning of an iambic line is admissible, as in Scott's: 'Breathes there a man with soul so dead,' and again: 'This is my own, my native land.' Lastly the interchange of two words beginning with the same syllable may well be the result of carelessness.

distant or possibly something abstract, that there should be a material symbol to represent it. Anything, a stick or stone or finger, will answer the purpose. Suppose for example we wish to state that murder should be punished capitally. We may then say: 'This man (pointing to some object) has committed murder; this man deserves to be hanged.' It is precisely in the same way that writers find it convenient to express general truths by an imaginary case. 'A murders B: A deserves to be hanged.' But it is not only in dealing with abstract ideas that this kind of definition is found to be of service. The subject spoken of may be material, and yet not admit of actual production before the hearer. Thus in the Roman conveyance of a distant estate in land the lawyers were in the habit of taking up any clod of earth and speaking of it as though it were the actual land then selling. In the first of the passages just quoted from the *Phormio*, *Davus* it so happens may point to himself: 'This man's honour in money matters you have thoroughly tried, and you are afraid, eh? to trust him with words.' But taking it as a general observation, *Davus* might point to a finger on his left hand as the imaginary person, saying: 'This man's honour,' etc. Further this interpretation of a relative construction accounts for the fact that in *Homer* the *apodosis* is often introduced by a conjunction; for the sentence just put forward might well have been expressed in the form, 'This man's honour in regard to money you have well tested, *and* yet you are afraid to trust him with mere words.' Examples of the Greek construction I borrow from *Kühner's Grammar*, §§ 723, 738:

‘Οἱ δ’ ἀρα Μηθωνῆν καὶ Θανμακίην ἐνεμοντο,
Τῶν δὲ Φιλοκτετῆς ἤρχεν.—*Il. β.* 716.

‘Ὅς κε θεοὺς ἐπιπειθῆται, μάλα τ’ ἐκλυον αὐτον.—*Il. α.* 218.

Ἀλλ’ ὅτε δὴ ῥ’ ἐκ τοιοῦ δυνωδεκατῆ γενετ’ ἦως,
Καὶ τότε δὴ πρὸς Ὀλυμπον ἴσαν θεοί.—*Il. α.* 493.

Add: ‘Οἱ δ’ ἐπεὶ οὖν ἠγερθὲν ὀμηγερέες τε γέγοντο,
Τοῖσι δ’ ἀνισταμένος μετέφῃ ποδᾶς ὤκυσ Ἀχιλλεύς.

—*Il. α.* 57, 58.

Another result of the view here taken is that it is enough to use a single pronoun; in which case it is the habit of grammarians unduly to assume that the relative is omitted. Take such an example as: The man you just saw is the celebrated N——; or in Swedish, Den Herren du nyss såg är den berömda N——; or, The gentleman you were talking with I do not know; Swed., Den Herren du talade med känner jag ej; and again from Shakspeare (Cor. 5, 5, 5), Him I accuse the city-ports by this hath entered, where *him* (as stated above) is well able to sustain the part of a nom. as well as an acc.

That the interrogative should be explained through the medium of the relative and not directly from the demonstrative, is already suggested by its remarkable agreement in form with the relative. All that is required besides is, that the so-called indirect use of the interrogative should have precedence of the direct use. The step is but a short one from 'Monstra eum qui id fecit' to 'Dic quis id fecit,' or 'fecerit,' for the original meaning of *dic-ere*, or rather, to use the older form, *deic-ere*, is the same as that of the Greek *δεικ-νναι*, viz. 'to show,' and hence *digitus* and *index* as used of the fingers; and on the other hand the use of the indicative in indirect interrogation is not uncommon in the older writers. The passage too from *quis fecit dic* to *quis fecit* alone, would be a natural abbreviation, the very tone in which a question is put rendering the use of the verb *Dic* a mere idle form, the more so as this word would in the full phrase be an invariable, and for that very reason all but superfluous, attendant on every question.

But the use of the definite pronoun to designate the 'indefinite' may well be regarded as self-contradictory at first view. Yet we ourselves have what is thoroughly parallel to it in the use of our word 'certain' in the sense of *quidam* or 'uncertain'; and indeed we have just seen that in the expression of abstract or general truths it is the habit of language to speak in definite terms, as though the case put actually existed. The lawyer in this way talks of A selling an estate to B. Again when Euclid in his fourth proposition says that under certain conditions two triangles will be equal to each other, he places before the eye

two special triangles; and in truth, if the eye is to be employed at all, he had no alternative. Yet he is of course dealing with any and every triangle. Some years ago I met an intelligent lady whose profession was that of a governess, and was asked by her whether a woman could learn algebra; and my general answer in the affirmative was followed by two other questions, Could *I*, and if so how long would I take? A life time, was my answer, if you speak of the whole of algebra. Aye, said she, but I should be satisfied if I could solve what you call simple equations. In that case, I said, a single afternoon would be enough; and the conversation ended in my teaching her what she wanted that very afternoon in little more than an hour. Rushing *in medias res* I took a problem out of Bland's examples; and after reading it to her, I said, I will at once write the answer on a piece of paper. Accordingly I scribbled something on the paper, and screwing it up placed it before her. We called the number '*incog.*'; and then reasoning out the details of the problem, we soon arrived at '*incog.* = so and so.' Whereupon she opened the screw of paper, and to her surprise found nothing in it. What did you do that for? said she. I answered that not knowing what the number was I of course could not put it down; but I did it because she would find it convenient to have something upon which to fix her thoughts. She then said that she had expected me in the solution to speak of *x* and *y*, and I had done nothing of the kind; upon which I pointed out to her that our term *incog.* had supplied the place of an *x*, and had answered every purpose, but with the one disadvantage that *incog.* contained five times as many letters as *x*. I have just used the phrase 'so and so'; here again we have the definite performing the duty of the indefinite. Another example is the habitual use of *there* in indefinite phrases, as 'there was once upon a time a man who . . .'; and hence there is some meaning in the strange way of contrasting the dangers of coach-travelling and railway-travelling. 'If a coach is upset, there you are,' perhaps with a leg broken, but still 'there you are'; but when a train is smashed, 'where are you'? Answer 'nowhere,' simply annihilated. This is a joke, but the Germans in all gravity use *da-seyn* for the general

notion of existence, and *darstellung* for the actual production of any object. So too the Germans have their *es ist*, corresponding to our *there is*.

A few matters which concern the pronouns remain for consideration. First, attention may be drawn to the fact that the idea of 'this' is often represented by reduplicate forms; and precisely in the same way we find it more expressive at times to say 'look look' rather than be satisfied with a single 'look.' Examples of such reduplicate forms are first of all the Greek *m. οὗτος* for *ὄν-τος*, *n. του-το* for *τον-τον*; a form which Buttmann is disposed to explain on another principle, saying: *οὗτος* gewissermassen ein Superlatif von *ὅ* ist. But the doctrine which treats *οὗτος* as reduplicate has the sanction of most philologists, and is confirmed by the habit of other languages. Thus first of all we find this formation in Germ. *die-ser* (and consequently E. *thi-s*), O. Norse *þes-si þet-ta*, Boh. *ten-to*, Lith. *szit-ta*; and another instance of similar reduplication is seen in the combination *nisi si*, where more frequently *nisi* alone is preferred. Secondly, the pronoun *is-to*,* *ques-to*, is also a reduplicate demonstrative, the very *d* of the neuter supporting the theory, so that the final *tud* represents an older *ton*. Again *ille* with the old variety *olle* seems to tell me that the first syllable was *iol*; and as I am aware that the Romans had a special love for an *l*, I am no way surprised to find this liquid occupying a place where I might have expected an *n*; and this interchange assumed, I now see an identity with our own *yon*, which is of course one with the G. *jen-er*. Then as regards the second syllable of *illo-* (*ollo-*), the double *l* points to a *mouillé* sound, as stated above, so that I have again the combination *yo*, and the *d* of *illud* suggests as before a final *n*, so that *illo-* would represent a form *yon-yon*. Add to this that *hic* having in its initial aspirate what in all probability, as has been shown, superseded a more genuine mute guttural, and having lost a final *e*, we have what for sound might have been written *ki-ke*. Thus the three Latin demonstratives seem to

* The *s* in these words before a *t* I have just claimed as a substitute for an original *n*, as in *ασβεστος*, *κρεμαστος*, *γαστηρ*, assuming the same interchange for Latin.

have been alike reduplicates. Nay *κενος* itself may have grown out of an older *κενρος* for *κεν-ρος*, so as to have in both syllables a variety for *yon*, and thus correspond exactly with *illo*-. A similar reduplication or superfluity is seen in such Latin constructions as *pro eo ut*, *præter quam quod*, etc.

In the relative forms reduplication also prevails, as in *ὅσ-τις*, together with the oblique cases *ὅ-του ὅ-τω*; *ὅ-που* etc. implying a form *ὅ-πος*; *quisquis*, *quisquam*, *quicumque*, with the advv. *utut*, *ubiubi*, *quamquam*, etc.; *who-so*; Sw. *kvad-som*. Our old language abounds in what appears to be superfluous addition of a relative or demonstrative pronoun to relatives. Thus the first line in Chaucer runs: 'Whanne *that* April with his shoures sote'; and soon after, 'Whan *that* they were seke'; and 'Eke in what araic *that* they were inne'; and 'Though *that* he was worthy, he was wise.' But in the reduplicate relatives the repetition seems to express 'this and this and this,' so as by enumeration to include 'all and several.' Hence *quisque*, Fr. *chaque*, Bret. *pép*, and, what here I cannot omit, the Finn *joca* (Vhael's Gr. p. 48) of like power, and *quicumque* become akin in sense to *omnes*; while *quisquam* is also a universal, although limited for the most part to negative sentences.

Throughout this paper it has been assumed that *ken* or *con* is the form of the parent verb; but it is far from impossible that this is a decapitated verb from a fuller *eken* or *ocon*, which again may have been a secondary verb deduced from a simpler verb *oc* 'see.' Such a form would account for the Latin *oc-ulus*, and would be a fitting pendant to *οπ* of the Greek *οπτομαι* or *οψομαι*. The Greek also had the dual noun *οκκε*; and again the theoretic *oc-on* from *oc*, would have a parallel as regards suffix in our *reck-on* from *reck*. On the other hand a trace of a preceding vowel is seen in the Greek *εκενος*, standing by the side of *κενος*, as also in the so-called adv. *eho* 'hither,' 'look here,' compared with *ho* of *huc* and *horsum*; and in the forins *ea eum eo* etc.* The forms *ecquis*, *equando*, etc., also receive their explanation on this theory

* Whether our particle *ever* as attached to the relative and its adverbs owe its initial to the same source, and be connected or not with the Greek *περ* of similar habit, I leave for further consideration.

in the simplest way; and above all *ecce* 'behold,' would be the imperative of the simple verb. Lastly, as the participles *sātus*, *rātus*, *sītus*, *lītus*, had the short vowel of the penult justified, as having been decapitated from trisyllabic forms, so *cātus* may perhaps be a participle standing for *oc-ātus*.

There remain for consideration a class of words beginning with an *n*, which by their meaning claim to be of pronominal origin, viz. *num* the simpler form of *nunc*, as still preserved in the compound *etiam-num* 'even now,' the Gr. *νν*, including alike *νν* and *νν* (*νν*), and the G. *nun*, together with our *now*. Add L. *nam* and G. *noch*. But not merely their meaning declares them to have been deduced from some pronoun, but the same is shown by their very form, as is seen, when we contrast *num* 'now' with *tum* 'then' and *cum* 'when'; *nam* with *tam* and *quam*; the G. *noch* with the G. *doch*, so like it in power. Hence we may admit the truth, and yet admire the boldness of the doctrine put forth by Riddle, or rather Lünemann, in his dictionary, that the forms with an initial *n* come from a pronoun, *nus na num*. As regards *nam* I have elsewhere contended that its original meaning is 'thus,' and consequently it is well applied in the addition of examples in support of a general assertion. In my grammar (§ 1452) I have given two quotations from Cicero, and references to passages in Plautus and Caesar. Let me now add:

Quói homini di própítii sunt, áliquid obiciúnt lucrí.

Nam égo hodie compéñdi feci bínos panes ín dies.

—Pl. Pers. 4, 3, 2.

Amícum castigáre ob méritam nóxiam

Inmóēnest facinus, uérum in aetate útile

Et cónducibile. Nám ego amicum hodié meum

Concástigabo pró commerita nóxia.—Pl. Trin. 1, 1, 3.

And add yet further Pl. Trin. 4, 3, 49; Men. 1, 1, 20; As. 1, 1, 110; Capt. 3, 1, 4 and 18; perhaps also *namque* in Hor. Od. 1, 22, 9.

But *enim*, so nearly one in meaning as well as form with *nam*, cannot be separated from it. The question here arises in wha

relation these forms, *nam num* etc. and *enim* stand to the pronouns which have been discussed in this chapter. On the one hand the Sanskrit has a pronoun which bears a strong likeness to them, viz. what Bopp (§ 369) regards as a compound pronoun *éta*, which in declension takes the forms for the m. N. *ésha*, Ac. *étam* or *énam*, I. *éténa* or *énéna*, D. *étasmái*, Ab. *étasmát*, G. *étasya*, L. *étasmin*; n. N. *état*, Ac. *état* or *énat*; the rest as the masc.; f. N. *éshá*, Ac. *étám* or *énám*, I. *étayá* or *énayá*, etc.; while for the pl. we find the double forms, ac. m. *étán* or *énán*, n. *étáni* or *énáni*, f. *étás* or *énás*, and so on. Beside these he places the declension of a Pali demonstrative taken from Clough: N. m. *só*, f. *sá*, n. *tañ* or *nañ*; Ac. m. f. n. *tañ* or *nañ*; I. m. n. *téna* or *néna*, f. *táya* or *náya*; Ab. m. n. *tasmá* or *nasmá*; G. m. n. *tassa* or *nassa*; L. m. n. *tasmiñ* or *nasmiñ*; Plur. N. m. *té* or *né*, f. *tá* or *ná*, *táyó* or *náyó*, n. *táni* or *náni*; Ac. m. *té* or *né*, f. *tá ná* or *táyó náyó*, n. *táni náni* or *té né*; I. m. n. *tébhi* or *nébhi*, *téhi* or *néhi*, f. *tábhi nábhi* or *táhi náhi*; G. m. n. *tésaṇ* or *nésaṇ*; L. m. n. *tésu* or *nésu*, etc.

But the Umbrian also seems to have demonstrative pronouns akin to what has been here seen, and again in twofold form *eso* and *eno*; and that they are of demonstrative power is abundantly proved by the fact that like the Latin they affix the demonstrative suffix in the form *c* (*k*), as acc. *esu-k* or *eso-c*, loc. *esumek* as well as *esume*. The other variety is *eno*, which again in the ac. takes a *k*, as *enu-k* or *inu-k* (cf. A. K. 1, 135-6).

But to return to the question how these forms stand to the pronouns of the Latin and Greek languages, I prefer at present to leave the question open. Either *nam num* etc. have lost an initial guttural, so that they are decapitated from *knam* or *ken-am* etc. and so go with *κενος*; or, as the initial *k* of our pronouns passed into a *t*, so as to give us *το τον* etc. in the one language and *tam tum* etc. in the other, so again this initial dental *t* passed into a dental liquid *n*; a change common no doubt in 'auslaut,' but assuredly less common in 'anlaut.' On the one theory the forms in Latin as *enim*, in Umbrian as *eno*, in Oscan and Umbrian as *eso*, have lost an initial guttural; while on the other theory we must recur to what has been said of *ecce*, *εκενος*, etc.

It was assumed above that the *ce* or *c* suffixed to L. demon-

stratives was abbreviated from *cen* 'look.' This is placed beyond a doubt by the Oscan forms in the Bantine inscription, as *ais-cen* = *hisce*, l. 25, and the fuller *eisu-ken* of l. 16 compared with the equivalent *eizu-k* of l. 29 (see Mommsen's *Osc. Stud.* p. 44; and A. K. Umbr. Spr. 1, 135).

CHAPTER XXVI.

SUFFIXES OF NUMBER.

THE suffixes of plurality have already come under view, first as regards nouns in the eighteenth chapter, and then as regards verbs in the twenty-fourth; but several other matters call for enquiry. We there saw that in our own language three varieties presented themselves, *en*, *es*, and *er*; and these we may with some confidence as-ert are of one origin, seeing that in the first place these consonants habitually interchange, as for example in the comparativel suffixes of Latin *ios* and *ior* by the side of the Gr. *ior*; again in the pronominal family, as G. *das*, *dar-ein*, and *von dann-en*; *was*, *war-ein*, and *von wann-en*. So too, when Schnakenburg in his 'Patois de la France' (p. 54) says: "Un phénomène fort singulier c'est l'apparition de l'*r* dans le patois du Nivernais au commencement de certains mots; p. ex. *deux renfans* 'deux enfans,' *mas raimis* 'mes amis,' *ben das rannées* 'bien des années,'" he must have failed to see that this *r* is a mere substitute for the preceding ^{silent} sibilant, ^{which precedes} transferred from the end of one word to the beginning of the next by 'Provection' as it is called (S. p. 92). It may be observed too that in the second example the change takes place in a suffix of plurality. But several questions remain, as first which of the three varieties, *en es er*, was the earliest occupant of the ground; and to this I would answer the nasal, as the changes from *n* to *s* and from *s* to *r* are of frequent occurrence. Thus in the comparison of the terms for the first numeral, *ov*-, L. *oeno*- or *uno*-, Fr. *un*, G. *ein*, E. *one* and *an*, with the L. noun *as* (*assis*), and Fr. *as* (*de pique*), the majority of votes fall to the nasal. Other cases have been and will be

seen in this book, and no doubt yet others will occur to the reader. But a stronger argument is found on the historical side, for the suffix *en*, at any rate with *us*, is the older. Now-a-days we have but few of this form surviving beyond *oxen* and *brethren*. But Chaucer has *assen* (v. 5867), swarm of *been* (10518), *eighen* (15563) and *eyen* (16963), *fleen* (16949); while two of the MSS. (A. V.) of Grosseteste's 'Castle of Love' exhibit *soulen*, *lawen*, *kynden*, *tymen*, corresponding to *soules*, *lawes*, *kyndys*, *tymes* of another MS. (H.). (See Trans. Philol. Soc. 1862-3, p. 56.) *Sustren* for *sisters* is also found in the first pair. Fiedler's Gr. (§ 138) gives, as in provincial use in the South of England, *plaazen* (*places*), *slone* (*sloes*), *peazen*, *housen*, *cheesen*, *ashen*; and *shoon* in Cheshire.

Then as to the origin of the suffix *en*, I think it possible that a symbol for plurality may have been suggested by some word denoting addition, for multiplication in arithmetic is but a short method of addition; and thus 'men' might have been first expressed by 'man and man and man.' It is by actual addition of terms, 'Wiederholung des Hauptwortes,' that plurality is at times denoted in Chinese, as: *ġiu* 'man,' *ġin ġin* 'men' (Endliche's Gr. § 153). On principle then a word signifying 'and' would have supplied a reasonable symbol for the idea; but *en* is the very form which our conjunction *and* takes in Dutch, and indeed our own word is often sounded in the same way. But I would not urge this, if I did not believe the Latin *et* to be a corruption of an older *en* or perhaps *ken* (see Essays, p. 166, and Chapter on adverbs in this volume), while the particle in Oscan again takes the shape *in* or *ein*. I need not repeat what has been said under the heads of declension and personal suffixes of the appearance of an *n* or final *m* in the notation of plurals by the side of an *s*; but it may be well to add that the Hebrew also has a suffix of like form and power in the familiar *cherubim* and *seraphim*; for I cannot assent to the doctrine that a strict line of demarcation must be drawn between the Semitic and the Indo-European families of language, but would rather suggest that unity of all languages is a priori more probable, than that so wonderful a discovery should have twice been made independently.

Nay it may with reason be contended, that on the one hand a discovery so valuable would rapidly be adopted by all who had the chance; and indeed if we can conceive any race so dull as not at once to grasp the offered boon, the nation in possession of the new power would forthwith in the battle of life carry all before it, and so annihilate the stupid ones.

The distributive numerals of the Latin language, *bini*, *terni* or *trini*, *quaterni*, etc., we at once connect with the cardinals *duo*, *tres*, *quattuor*, etc.; but a thought may also be given to the suffix, of which the nasal forms the chief element; and I would ask whether the symbol of plurality before us does not supply precisely what is wanted, so as to give the meaning 'sets of two,' 'sets of three,' and so on.

So far I have not noticed that in some languages nouns are at times used in the singular with numerals of plurality, as *five pound* of sugar, *ton* of coals, *head* of oxen, *pair* of shoes, *brace* of birds, *couple* of snipe, a *five-foot* rule; and the same habit prevails in German, as *fünf Pfund*, *fünf Stück Ochs*; and I believe in many other languages; but I happen not to have taken notice of the instances. It is only reasonable that this should be so, as after a definite numeral an indefinite suffix of plurality would be worse than superfluous. Collectives again abound in perhaps all languages, as E. *sheep*, *sand*, *dust*, *cattle* (corrupted however from a plural *capitalia*); G. *Vieh*, *Rind*; L. *pecus*; Gr. *πov*, etc.

In the ninth of my 'Essays' I have dealt with some thirteen instances where plural forms are employed with the meaning of a singular. The first in the series was *castra*; and I defended the use of this word in the sense of a 'camp' by the assumption that it originally meant 'trenching tools,' viz. 'axe, pickaxe, spade,' etc., as employed in making a Roman camp; so that the word was a derivative from *cad* of *caedo* 'fell,' or *cado* 'be felled,' with a suffix like that of *rastrum*, *rostrum*, *plastrum*, *claustrum*, from *rado*, *rodo*, *plaudo*, *claudo*; but for the full argument I must refer to the paper itself. Other words similarly treated were *furcae* with its diminutive *forcipes* etc., *uolsellae*, *bigae*, *quadrigae*, *casscs*, *folles*, *literae*, *limina*, *currus*, *septentriones*,

and *menta*, as used in Vergil (Aen. 6, 810). I will now add a few others.

When plural forms are so used to represent the singular of a collective idea, a difficulty presents itself, if it be desired to speak of such collective ideas in the plural. If *castra* for example means 'a camp,' what form is to be used for the plural 'camps,' so as clearly to express the distinction? When numerals are added, the object is attained by employing the distributives, as *bina castra* 'two camps,' *trina castra* 'three camps,' and so on. So *duae literae* means 'two letters' of the alphabet, *binæ literae* two letters or epistles; and this with reason, as in the second case we have two 'sets' of alphabetical characters. With this idea before me I came across a passage in Caesar's Gallic war (1, 53, 5): C. Valerius Procillus cum a custodibus in fuga trinis catenis ninctus traheretur; and at once asked myself, why not *tribus catenis*, if *catena* really meant 'a chain'? In Richardson's English Dictionary the chief merit lies in the chronological order of quotations; and if Latin lexicographers had more uniformly attached a high value to this point, they would have escaped many errors. In the present instance the true meaning of *catena* is seen in one of the oldest authors as 'a wooden hoop or band' for a barrel etc.: in eum orbem tris catenas indito (Cato r. r. 18, 9); and the same meaning still lived to a late period in rustic language, and also as a technical term. Thus Palladius (Nov. 15, 2) says: Vlmus et fraxinus, si siccentur, rigescunt; ante curuabiles catenis utiles habentur. Vitruvius again (7, 3, 1) seems to use *catenæ* in a somewhat similar sense, for he observes that they should be made *e buxo*, *iunipero*, and so on; and what he here says is substantially copied by Palladius in his preliminary book (1, 13, 1). It seems probable then that for a chain made of iron or any other metal, *catena* in the singular meant ^{at first} only 'a single link,' so that a plural *catenæ* would be required to denote 'a chain.' But here again, as with other such plural units, the simple *catena* was eventually employed for a chain. Already Sallust (ap. Prisc. 1, 536, 10 K) has *nexuit catenæ modo*. Again we find in Hor. ep. 1, 2, 63, *hunc tu conpescce catena*; od. 3, 8, 22, *sera domitus catena*; so that we must abstain from substituting *trecenæ* in

od. 3, 4, 79 : trecentae Peirithoum cohibent catenae. As regards the etymon of *catena* I would compare it with *laterna*, which written in the oldest writers, as Plautus and Cicero and even in Vegetius, *lanterna*, appears without the *n*, but still with a long vowel, in Martial's *Dux laterna niae*; while Priscian deriving it from *lateo* (*luceo lucerna, lateo laterna*, 1, 120, 20 K)—a nice parallel by the way to *lucus a non lucendo*—seems to have pronounced it with a short *a*. I would suggest then that *cătēna*, in spite of its short vowel,* may well have grown out of a fuller form *cantēna* and so be related to *καμπτω* 'bend,' as *lanterna* to *λαμπτηρ* and *λαμπω*. It may be observed too that *cam* of *καμπτω* was already well known to the L. vocabulary, as in *camurus* and *camera*, even admitting the view of Macrobius that these were loan-words from the Greek (Sat. 6, 4, 23). Plautus indeed (Truc. 5, 50) has: *campas dicis*.

The meaning and derivation of *catena* here put forward is confirmed by the form *cand-ela* 'a hoop or band,' which is wholly unconnected with *candela* 'a rushlight,' from *candeo*. Thus Pliny (13, 85) in the narrative about Numa's collection of Pythagorean writings, as found in a chest which was dug up many centuries after his death, tells us: *lapidem fuisse quadratum circiter in media arca, euinctum candelis quoquouersus*. These are the words, he says, of Cassius Hemina (*ipsius Heminae uerba*). Hence Livy in his account of the same affair may also have used an antiquated phrase, when he wrote (40, 29, 6): *in altera arca duo fasces candelis euoluti (euincti?) septenos habuisse libros*. Some critic has proposed in the text of Pliny to substitute *catellis*; but as Livy and Pliny alike have *candelis*, this is of course inadmissible. *Candela* or *candella* for *candenula* may well be a diminutive of an older *candēna*, a variety of my assumed *cantēna*. Sanskrit also, I am told, has a verb written² like *cant* and *cand* with the sense of 'bind.' For the interchange of the

* When a trisyllabic word has a long penult, it is ever ready to shorten a long antepenult, as *curulis*, *ofella*, *mamilla*, *lucerna*, *molestus*, from *currus*, *offa*, *mamma*, *lux lucis*, and a lost n. *mōlus -eris* = *mōles* (cf. *glomus -eris* by the side of *globus*; and Pott, E. F. 1, 235, note, ed. 1859).

combination *mb* (*mp*) with *nd* (*nt*), see p. 57. What is here said may supersede, I trust, the assumption of Freund and others, that *candela*, as used by Cassius Hemina, means : eine mit Wachs überzogene Schnur.

In the passage just quoted from Livy occurred the phrase *septenos libros*, which raises the question whether *libri* itself does not fall into the present category. Now it is generally held that *liber* had for its earlier meaning the inner thin bark of certain trees, which supplied a natural material for writing. Similarly our own term *book*, G. *buch*, is said, perhaps with reason, to be virtually one with G. *bu*che, E. *beech*, this tree being remarkable for the thinness of its bark. The *er* of *liber* is probably of diminutival power, as in *puer*, and our own *fresher* 'a young frog,' and Sc. *childer*, so that *liber* itself should mean 'a piece of bark'; and of these many would be required to make a book. But if so, 'a book' should have been denoted by *libri*. I seek then the evidence of the language in its oldest form. In the Corpus Inscr. 198, 34, I find : *tabulas libros leiterasue proferre*, where it stands between words which confessedly belong to the class of nouns now under consideration, *literae* and *tabulae*. Again in the same document we see : *exque iis libris quae ibei scripta erunt in tabulas publicas referenda curato*. Nay it occurs there also as the equivalent of *tabulae* : *eaque omnia in tabulas publicas referenda curato eosque libros per legatos . . . ad eos quae Romae censum agent mittito*. If *liber* in the singular had already denoted a book, the legal language, seldom afraid of full forms, would have given in the second quotation : *exque eo libro ieiue libris . . .*

But even for Livy in one application of the word the plural maintained its existence with the sense of a single book, I mean, as employed for the collection of the Sibylline prophecies. Thus : *libri per duumviros sacrorum aditi* (3, 10, 7 ; add 10, 47, 6 ; 21 62, 6, etc.). Now Pliny says (13, 88) : *Inter omnes convenit Sibyllam ad Tarquinium Superbum tris libros attulisse, ex quibus sunt duo cremati ab ipsa, tertius cum Capitolio Sullanis temporibus*. It is true that Gellius (1, 19) tells us that the first offer of the Sibyl was *novem libri*, of which she burnt first three, and then a second batch of the same number, Tarquin eventually

buying the three left at the price which had been asked for the nine. But Pliny is a better witness than Gellius; and indeed the latter may have been biassed by the very term *libri Sibyllini*. Of course *liber* in the singular in the end came to signify a book, and hence the phrases just quoted, *tris libros* in Pliny, *novem libri* in Gellius.

But the etymon of *liber* deserves a word or two. Freund and his copiers are silent on this topic, yet Forcellini already points to the truth in the words: dictus est quasi *leper* ab Aeolico λεπορ pro λεπος; and this has support from *leber*, an old variety of the L. noun (Quint. 1, 4, 17). It was not however necessary to quit the L. domain in the search for its origin. A short *i* in a penult is ever convertible with a short *u*, and we cannot have a better example for our purpose than *libet* with its older form *lubet*, akin to our *love*. But the assumed *lüber* may well be referred to the verb *glūbo* 'peel,'* the long vowel of which (s. p. 144) constitutes no difficulty. But *glubo* itself by its vowel *u* suggests that it may have been compressed from a form *col-ub-o*, a frequentative of a verb whose root is *col*. This conjecture assumes a more solid shape when I find *col-or*, for which I have long claimed 'skin,' as the first meaning. Hence it is that Cicero in his metaphorical use of the word is fond of taking it with *succus* and *sanguis*, as: ornatur oratio . . . quasi colore quodam et succo suo (Or. 3, 25); amisimus omnem non modo succum et sanguinem sed etiam colorem . . . ciuitatis (Att. 4, 16). The L. *cor-ium* too and *cort-ex* are of the same stock, as also σκυλος σκυλον, and above all χ(ο)πος, which like *color* having for its first meaning 'skin,' came to signify the 'complexion' of the face, and ultimately generally 'colour.' Lastly we have the representative of the L. root *col-* in our verb *hull* (peas etc.).

In the same class with the pl. *catenae* 'a chain' and the pl. *libri* 'a book,' we may include *scopae* 'a broom,' the sing. *scopa* being originally used alone of 'a single broom plant'; and *scalae* first 'a ladder' and then 'a staircase,' so that *scala* in the sing. probably meant originally 'a round' of a ladder. Yet even these seem to have been ultimately used in the sing. for 'a broom' and

* I owe this idea to the late Rev. Mr. Cockayne.

‘a ladder,’ for Quintilian (1, 5, 16) in condemning such usage admits the fact.

I pass to another subject. It is the ordinary habit of language to form plurals by the addition of a suitable suffix to the singular. But in Welsh what looks like the reverse operation is seen. From a word denoting a plural or collective a secondary noun is formed by the addition of the diminutival suffixes *en* or *yn* to denote a single unit, as :

adar	birds	aderyn	a bird
afan	raspberries	afanen	a raspberry
blew	hairs, hair	blewyn	a hair
clyr	hornets	clyryn	a hornet
cnau	nuts	cneuen	a nut
eithen	furze	eithinen	a furze bush
ffa	beans	ffäen	a bean
maip	turnips	meipien	a turnip
plant	children	plentyn	a child
pluf	plumage	plufen	a feather.

Sometimes the simpler word is in form a singular, denoting first an undivided mass, and the secondary form a piece of it, as :

aur	gold	euryn	a gold trinket.
ceuled	rennet	ceuleden	a curd
ewyr	wax	ewyren	a cake of wax
dur	steel	duren	a steel
iâ	ice	iäen	a sheet of ice
toes	dough	toesyn	a lump of dough.

Or again it may be still a sing. denoting a mass of divided matter, and the secondary a grain of the same, as :

brag malt	bregyn	had seed	haden
ceirch oats	ceirchen	haidd barley	heidden
gwenith wheat	gwenithen	rhyg rye	rhygen.

Sometimes the simpler word denotes some kind of wood, and the secondary form a tree of the kind in question, as : balwyf, palm-wood ; balwyfen, a palm ; ysgaw, elder-wood ; ysgawen, an elder.

In all these cases the use of the plural in the first place is the natural result of first regarding the whole in the mass; and indeed we ourselves pursue the same course, as: *sand, dust, powder*, etc., on the one hand, *gold, steel, wax*, on the other.

Then turning from the Keltic to the Slavic family, I may point out that a formation of precisely the same kind is to be seen in Polish, where the ordinary diminutival *ek* is added to collectives to denote a single unit, as *groch* 'peas,' *grosz-ek* 'a pea;' while the ordinary power of *ek* is seen in *kąt* 'Winkel,' *kąt-ek* 'Winkelchen,' *kłos* 'Aehre,' *kłos-ek* 'kleine Aehre,' *kot* 'Kater,' *kot-ek* 'Kätzchen.'

The Arabic again, as I am informed by Prof. Rieu, has what is parallel in:

shajar	trees	shajarah	a tree
bakar	cows	bakarah	a cow
naml	ants	namlah	an ant.

In our own language at times a mere blunder converts a singular into a plural. Thus the Fr. *richesse* passing into English as *riches*, was very properly a sing. at first, as in Shakspeare (*Othello*, 2, 1) 'The riches of the ship is come on shore'; and (3, 3):

But riches fineless is as poor as winter
To him that ever fears he shall be poor.

Nay with Chaucer, a plural *richesses* is of frequent occurrence, especially in the 'Tale of Melibeus.' But now, owing to its final *es*, *riches* is treated as a plural. The same has happened to the Gr. *ἐλεημοσύνη*, which in A.-Sax. took the form *ælmesse*, and is with us reduced to the monosyllable *alms*, which again having the look of a plural is received as such. So again the A.-Sax. *efese*, a fem. sing., 'a brim or brink,' taking the shape *eaves* (of a house), has practically ceased to be a singular. *Pease*, from the L. *pisum* or Fr. *poix*, was for a time regarded as a collective; but dropping its final vowel was in the end mistaken for a plural; and accordingly *pea* came into use as a singular, and seems likely to maintain its position in this character. *News* has met with the reverse treatment, for we now treat it as a

singular: 'This news came by wire' and so on but Shakspeare has in Othello (1, 3, and 2, 2) and in Lear (2, 1) the following:

There is no composition in these news that gives them credit. Indeed they are disproportioned.

For besides these beneficial news, it is the celebration of his nuptial.

You have heard of the news abroad; I mean the whispered ones, for they are yet but ear-kissing arguments. Not I. Pray you, what are they?

Our term *gallows* and the G. *Galgen* would correspond with all accuracy to each other, if they were plurals; but the latter is commonly held to be a singular with a gen. *galgens*; and the former is also a singular with us, as in Scott's Heart of Mid-Lothian (c. 2): On the night of the execution the gallows disappeared and was conveyed in silence . . . to the place where it was usually deposited. That the word was originally a plural seems to me well established by the fact that a Scotch use of the word was for the pyramidal arrangement of three beams for the support of a heavy mass, as in weighing hay, what in fact is sometimes called 'a triangle' (see Jamieson, *sub v.*). But be this as it may, the tendency to convert 'pluralia tantum' into singulars is shown not merely by the passage of *forcipes*, as used by Lucilius, to *forceps* in Vergil; but this very word *forceps* was recently in my hearing deprived of its *s* by a surgeons' cutler, who in answer to an enquiry for a pair of pinchers said 'you mean a *forcep*, sir.'

Here we have a singular substituted for a plural; but the converse is seen in our own use of *you* for *thou*, and a similar use of the Fr. *vous*, and the editorial *we*. The French again at times allow the use of *nous allons*, where but one is speaking; and this again in colloquial language leads at times to the solecism *j'allons*. The Germans proceeded yet a step further. As though afraid to address a superior or to fix their eyes upon him, in defiance of our own saying that a cat may look at a king, they

adopted a phraseology which referred to him as an object out of sight; and nowadays, this humility of language is extended to intercourse between equals, as: *Sie haben recht, danke Ihnen*. Spanish flattery or rather politeness uses *Vuestra Merced* or *Vsted* for a mere pronoun of the second person, or generally abbreviated to *Vd* or *V* alone. We in the same way have phrases of respect, as *your Majesty, your Grace, your Lordship, your Honour, your Excellence, your Worship*. It may be observed that in German the use of *Sie Ihnen* etc. for the second person requires a capital initial, on the same principle perhaps that He His Him are now commonly adopted in special references in religious language, or again the Us and Our in speaking of governmental commissioners, *e.g.* in the phrases, 'the power vested in Us,' 'at Our discretion,' of a document now before me.

DUALS.

The dual forms have been so far omitted, as they were also omitted in the treatment of nouns (C. 18, on declension); and this because the question affected both substantives and verbs, so that it was thought best to reserve the question until the two might be considered together.

Suffixes of this class characterize the Greek, Sanskrit, Zend, Lithuanian, Gothic, Hebrew, Arabic, Syrian (so Bopp, § 114, etc.); and in the Finn family, Lapp, Vogoul and Ostiak (so Prince Lucien Bonaparte). In some of these however the use is limited or almost limited to the verb, as in Gothic, or to the noun, as in Hebrew. In Pali, Latin, and Old Slavic, Bopp confines the use of it to the numerals signifying 'two' and 'both'; and he also found a slight trace of the forms in Armenian (§ 309).

As regards pronouns we have a true dual in the Lith. n. ac. *ve-du, mu-du* 'we two,' 'us two,' d. i. *mum-dvēm, g. mūma-dvėju*, for here we have a suffix which distinctly represents the numeral 'two.' So also in p. 298, l. 9, n. ac. *jù-du*, d. i. *jùm-dvēm, g. jūma-dveju*. And again in Go. *vīt* 'we two,' *jut* (?) 'you two,' if it be true, as seems probable, that the *t* is a remnant of the numeral.

Again the Keltic family also has real duals, in which the numeral is mixed up with the noun, as the old Erse: *dathene* 'duo ignes,' *iter dashgid* = 'inter duas vias,' (Zeuss. ed. Ebel. p. 259); and the old W. *ary-deu-lin* 'in genua,' from *glin* 'genu,' *deuglust* 'aures,' from *clust* 'auris,' *deutroet* 'pedes,' *dwgyuron* 'mammae,' *dwreich* 'brachia,' *dwydun* 'coxae' (ib. p. 280).

But for the most part the so-called dual has no trace of the numeral two, and is in fact but a variety of the plural. Thus in Sanskrit *uehimus* is represented by du. *vaḥ-avas*, pl. *vaḥ-amas*; *uehitis* by du. *vaḥathas*, pl. *vaḥ-atha*; *ferebamur* by du. *abhar-āva*, pl. *abhar-āma*; *ferebatis* by du. *abhar-atam*, pl. *abhar-ata*. Similarly in Greek du. *φερετον* and pl. *φερετε* are alike in origin only plurals, for as the *ν* of the former is a symbol of plurality, so *φερετε* has no doubt lost a final *ς*, just as the L. imperative *ferte* has superseded a more genuine *fertis*. Again to *uehimus* corresponds a Lith. du. *vēz-ava*, pl. *vēz-ame*, O. Sl. du. *veš-evé*, pl. *veš-eme*, all of which have lost a final *s* or *n*, while the *m* and *w* are readily interchanged, especially in this pronoun.

Then for nouns Bopp, comparing the suffixes of the duals, S. *aṣṛáu*, Z. *aṣṛáo*, says (§ 207):—"The S. *áu* has *áo* for its representative in Zend, and this *áo* stands at the same time for a S. *ás*, thus giving an emphatic proof that the dual ending *áu* is nothing else than a corruption of *ás*." Here he points no doubt to the S. pl. *aṣṛás*. Thus the main difference here consists in the loss of an *s*. Precisely in the same way correspond the Gr. d. *πατερε*, *φεροντε*, and pl. *πατερες*, *φεροντες*; and nearly so *νοι* with its contracted *νω* and L. *nos*; *σφωι*, *σφω*, with L. *uos*. Again the double forms just exhibited serve to identify the pl. *ἱπποι* with the d. *ἱππω*. Then *νω-ιν σφω-ιν* as datives, have the same suffix that is seen in *ἡμ-ιν ὑμ-ιν*; while as genitives, like *παιδων*, they have a suffix not unlike what is seen in *παιδων*, which was probably a compression from *παιδ-οσν* or rather *παιδ-οσ-εν*, so that this theoretic form losing its sibilant might well pass into *παιδων*, or, losing its *ε*, into *παιδων*. In Lithuanian d. *sūnu* stands to pl. *sūnūs*, much as *πατερε* to *πατερες*. Returning to Sanskrit the d. and abl. of the dual *aṣṛa-bhyám* differs from the pl. *aṣṛé-bhyas* in little more than the interchange of the two

plural suffixes *m* and *s*, that is, the very change which occurs in the second person of the dual in verbs, as *bharatas* in the pres. but *abharatam* in the past imperfect. Again the Lith. dat. and instr. of the dual *āshwō-m* is but a shortening of the pl. dat. *āshwōmus*, aft. *āshwōms*, or instr. *āshwō-mis*. So too the O. Sl. dat. and instr. *vidova-ma* has beside it a pl. dat. *vidova-mŭ*, instr. *vidova-mi*.

Lastly the S. *dva*, *ubhā*, L. *duō*, *ambō*, Gr. *δvo* *αμφω* with *δvov* *αμφov*, alike as gen. and dat. have the special forms of the dual, as also to a certain extent the Zend, Lithuanian, O. Slavic (see V. G. § 273).

On the whole then it is tolerably clear that the forms called dual are but varieties of the plural, which have become limited in meaning.

But the question remains how in these languages a special form attained the special dual power; and the explanation which presents itself to my mind is this, that in most countries there are coexisting dialects, one through mere accident in high favour, others still prevailing in different districts. For public use therefore the favoured language alone is available, but under the domestic roof, the dialect of the district, however despised, still lives. In this state of things, what is addressed to 'the public has generally to deal with large numbers, while by the fireside the number 'two' is more frequently called for.

I will close this chapter with a reference to what Bopp says in § 206. While he seems to hold generally that dual forms are but plurals more or less disguised, he contends that "the dual, inasmuch as it has a clearer view than the indefinite plural, has a love for the broadest forms as better suited to increase emphasis and give life to the personification," and he refers to the d. *açrāu* as opposed to pl. *açrás*, not a powerful witness in his favour, and to d. *açrūnī* 'tears' by the side of the pl. *açruni*. But there seems little support for this doctrine. It is true that *vaḥathas*, *abharatam*, *φερετον*, are longer than *vaḥatha*, *abharata*, *φερετε*; but on the other hand *νω πατερε παιδov*, L. *duo ambo*, Lith. *āshwōm*, are shorter than *nos πατερες παιδεσσιν*, *duos ambos*, *āshwōmus* or *āshwōmis*.

CHAPTER XXVII.

GENDER.

THE question of Gender divides itself into two heads, its original object to denote sex, and the strange extension of this idea to inanimate objects, where it is of course strictly speaking inapplicable. We have first to deal with the original use of the term; and here we have to correct the prevailing doctrine that there are three genders, masculine, feminine, and neuter. No doubt the term 'neuter' began in such a phrase as *vocabula neutrius or neutri generis* (as Charis. 1, 23 K.); and from this a derivative *neutralia* was properly deduced (id. 18, 16; 21, 23, etc.); but still the love of brevity prevailed, so that already the same writer has *masculinum femininum neutrum* (17, 10; add 29, 25), *neutrum in um, hoc bellum* (23, 15). The absurdity of a third gender therefore is not the invention of modern writers. Of course it is often a convenience in speaking of living creatures to do so without reference to sex, which in many cases is unknown and in many of no moment. Such is especially the case with young children before they wear a distinctive dress; and hence neuter forms were preferred in Greek for *τεκνον, τεκος, βρεφος, παιδιον*, and in Go. *barn*, A.-Sax. *bëarn*, O. G. *chind*, G. 'Kind,' A.-Saxon *cild*. With animals again the sexes, though marked in the adult, as for example in the lion, the peacock, the pheasant, etc., do not exhibit much distinction in the early stages of life. Hence in German we find *das Kall, das Lamm*, together with the diminutives *Lämmchen, Kätzchen, Hühnchen*. But even for the adult animal it is again a convenience to have terms which shall be silent on the question of sex, and so the Germans

have the terms *das Rind* 'horned cattle,' *das Schaf*, *das Schwein*, *das Vieh*, etc.; terms which are then available like the Gr. *πῶν* and Lat. *pecus* as collectives. Again in terms of affection the Greek language was not afraid to use the neuter in reference to women, and hence in Terence such forms as *Glycerium*, *Dorcium*, *Phanium*. In not a few cases the practice has established itself of assigning to a whole genus of creatures a fixed gender in defiance of fact. Thus in Latin we find *curculio*, *uespertilio*, *papilio*, *mus*, *uernis*, *lepus*, always masculine; and this when speaking distinctly of the female, as, for example, where Varro (r. r. 3, 12, 5) says: "Qui lepus dicitur cum praeagnas sit tamen concipere." And so Pliny (8, 219): "Lepus omnium solus praeter dasypodem superfetat, aliud in utero pilis uestitum, aliud inplume, aliud incohatum gerens." So *fecundi leporis* has the best authority in Horace (Sat. 2, 2, 44). The same with *λαγῶς* in Greek, whereas we prefer to assign the female sex generally to this creature, as in Gay's fable of "The Hare and many Friends." Similarly the cat with us is habitually "a she," a dog rather "a he"; and here again the Latin differs from us, *canis* (*canes*) taking in preference the feminine gender, so that its only diminutive is *canicula*. The reason for this difference may be that with us the two leading domestic animals being the cat and dog, we are disposed to attach the notion of feminine to the weaker and more cunning of the two, for weakness is naturally apt so to compensate for its inferiority. On the other hand the Roman saw little of the cat, and so probably opposed the dog to the wolf. In the same way the fox as contrasted with the more powerful wolf was for a Roman habitually a feminine, *uolpes*, *uolpecula*.

The distinction of gender is marked in several ways, first by the use of distinct words for each sex, as *taurus*—*uacca* 'bull—cow'; *aries*—*ouis* 'ram—ewe'; *uerres*—*sus* 'boar—sow'; *uir*—*mulier*; *Mann*—*Frau*, etc.; but on this head more presently. Secondly, by attaching a term expressive of sex, as *man-child*, *cock-sparrow*, *dog-fox*, *tom-cat*,* *boar-pig*, *hen-sparrow*, *she-cat*, *mutter-*

* Whence Grimm (3, 342) obtained his authority for an English use of *boar-cat* I cannot find.

pferd; so also *pea-cock*, *pea-hen*; *porcus femina*, Cic.; *polypus femina*, Plin.

It is often said that gender is at times marked by the mere addition of a meaningless suffix; but at any rate, in many of the alleged cases, the said suffix was in origin a word denoting a male or female. Thus the *er* of our *gand-er*, G. *kat-er*, and perhaps the Lat. *ans-er*, has been rightly identified with the *er* of *coop-er*, *garden-er*, *barb-er*, the *or* of *tailor* (*tailleur*), the *ur* of the W. *bat-ur* 'boatman,' *barf-ur* 'barber,' and so with the W. noun *gwr* and Lat. *uir*. So again the *ων* of *λε-ων*, *λε-on-*, *παρ-on-*, may be the same suffix with that of *καυρ-on-*, *βιβ-on-*, and so one with *αν* of *αν-ηρ* and our own *man* (al. *mon*). In the Go. *gait-sa* 'capra,' and the G. *fär-se* 'heifer,' by the side of *farre* 'bullock,' as also in the Gr. forms *τυπτονσα* (for *τυπτοντσα* or perhaps rather *τυπτοισα*), *χαριεσσα* (for *χαριεν-σα*), *μελισσα* (for *μελιτ-σα*), *Κιλισσα* (for *Κιλικ-σα*), *Λιβυσ-σα*, etc., we have probably a feminine article *sá* (as in Sanskrit), so that the forms are virtually one with that of *she-goat*, etc.

Nor should we admit that in those suffixes which yet defy analysis the origin was of a different kind. Not unfrequently a suffix *in* (*inn*) presents itself, as in German *Füchs-inn* (*vix-en*), *König-inn*, also *reg-in-a*, *βασιλ-ιννα*. So in A.-Saxon we find this suffix in the form of *en*, as *ġin-en* 'a maid-servant,' from *ġen* 'a servant'; *ġeow-en* 'a female slave,' from *ġeow* 'slave'; *wylen* or *wyln* 'a foreign woman,' from *wealh* 'a foreigner.' Again as *n* is freely interchanged with *s*, we should no doubt include the Slav suffix, as seen in Boh. *lw-ice* 'leaena,' from *lew* 'leo'; *osl-ice* 'asina,' from *osel* (G. *Esel*, *asinus*); as also our own *ess* of *lion-ess*, *count-ess*, etc., corresponding to *βασιλ-ισσα*. The Welsh too has *brenin* 'king,' *brenines* 'queen'; *bachgen* 'a boy,' *bachgenes* 'a young girl'; *cath* 'cat,' *cathes* 'she cat'; *cawr* 'giant,' *cawres* 'female giant,' etc. With the same *in* we ought probably to connect the Greek suffix *ιδ*, as in *Σικελ-ιδ*, *Αργολ-ιδ*, *Θεσσαλ-ιδ*. As to the Greek feminines in *ω*, as *Κλειω*, *Καλυψω*, etc., Abrens (-cc Proc. Ph. Soc. vol. 6, p. 155) has clearly shown that the crude form was *Κλειοι*, etc., in agreement with the termination of the vocative, and further that such forms are deduced from mascu-

lines in *o*, as *Αρχιω* from *Αρχιος*. Thus a mere *ι* would appear to be the suffix; but in the case of *γυνη*, the vocative *γυναι*, together with the oblique cases *γυνα-ικ-ος*, etc., we see that a suffix, *ικ*, may lose its *κ*; and hence we are led to compare the suffix *ι* of *Αρχιο-ι*, etc., with the suffix *ie*, so familiar in Latin feminines, such as *nictr-ix*, *cultr-ix*. But this very suffix has exchanged its guttural for a sibilant sound in the Fr. *impératrice* and our *empress*, so that we are brought again to the *ω* of *βασιλισσα*. It should have been noted above that the *va* of *βασιλιννα*, as of *τεπεινα*, *μελαινα* (for *τεπειν-va*, *μελαν-va*), grows out of *σα* through what Bopp calls reversed assimilation.

In middle Dutch the same suffix held its place for a while, as *becker-sa* 'pistrix,' *springer-se* 'saltatrix,' *helper-se* 'auxiliary,' *tolner-se* 'toll-gatherer' (D. G. 3, 40; see also 2, 328); and in what is but little altered, the modern Dutch *wever-sche*,* *meier-sche*, *naier-sche*; and without a preceding *er*, *Adam-sche* 'wife of Adam,' *kök-sche* 'cook' (D. G. 2, 329). Yet this suffix Grimm thinks may have been borrowed from the French *duchesse*, etc.

The A.-Sax. suffix *estre* (*istre*), Dutch and E. *ster*, as seen in A.-S. *sang-estre*, *bäc-estre*, *vebb-estre*, *seam-estre*, by the side of the m. *sang-ere*, *bäc-ere*, *vebb-ere*, *seam-ere*; D. *bak-ster*, *wasch-ster*, E. *song-ster*, *bag-ster*, *web-ster*, *spin-ster*, may well be made up of a feminine suffix *is* and a diminut. *er*, the *t* being excrescent. In English indeed this suffix lost in a great measure its feminine character, so that *demster* for *doomster* was used of an executioner, an office ill-suited for a woman; and accordingly *seamstr-ess*, *songstr-ess*, called for a repeated suffix to mark the gender.

I have already given a warning against the heresies of Sanskrit philologists, that the Sanskrit language in its *yūni* 'heifer,'

* I am told by an intelligent native of Holland, that these five words are wholly unknown to him. Yet Grimm was not a person likely to give them without some authority; and my informant himself furnishes two parallel cases of words still living "in a very remote part of the country," *meestersche* 'wife of the schoolmaster,' *majoorsche* 'wife of the sergeant-major.'

yanitri 'mother,' has a superiority over their Latin analogues *iunic-*, *genetric-*, in that the latter they say has added an enepenthetic *c*, thus reversing the fact. It is also held by some of them, that the *ι* of *τερε-ι-να*, *μελα-ι-να*, is inserted in these words as a symbol of the feminine gender, a doctrine far too violent for acceptance, especially when opposed to the argument already detailed in p. 230.

Another doctrine to be rejected is that in which it is laid down that the nominative *s* (*r* in Norse) is a sign of the masculine. Such is the teaching of Rask in his Norse Grammar, § 141. Happily in § 159 he informs us that "In the oldest times there were also found many feminines in *r* which have since lost this letter." But there were also some which retained the *r* to the last, as *kȳr* 'cow,' *sȳr* 'sow,' so little was the *r* a symbol of gender at the outset.

The doctrine that the nominative *s* is well fitted to denote the masculine is probably due to the fact that in the declension of adjectives, whether the Greek *γαθος*, *η*, *ον*, or the Latin *bonus*, *a*, *um*, it is only in the masculine that the sibilant occurs; but it should be recollected that in not a few Greek adjectives, as *αδικος διαφορος*, the form in *ος* is available for feminines, and so also that there are many feminine nouns in the two languages, like *δδος* and *colus*, to say nothing of the trees *alnus*, *ulmus*, etc. But besides this, a similar argument applied to adjectives like *acer*, *acris*, *aere*, might well have led to a very opposite conclusion, as *acer* is almost exclusively masculine, *acris* generally feminine. But the simple fact is that the *s* in itself was the symbol of the agent alone, and so once belonged to all masculine and feminine nominatives. Thus Terence, in the 'Eunuch,' gives the names *Pythias* and *Dorias* to females, while in the very same play we have a male *Phaedria* and *Chaerea*. It might have been inferred that these nominatives *Pythias* and *Dorias* had a gen. in *adis* but for the fact that Donatus makes the acc. *Pythiam* (5, 2, 69) the gen. *Pythiae* (5, 3, 1; 5, 4, 24, and 26). At the same time it is of course admitted that in the end *bonus* and *bona* had a distinction of gender attached to them, and then it was found convenient to use with a like difference

lupus and *lupa*, *ceruos* and *cerua*, *seruos* and *serua*. Yet with all this, what has been said in the section on Diminutives still holds, that *a* of the first declension, *o* of the second, like the *i*, *u*, and *e* of the other declensions, originally grew out of forms *ac* *oc*, etc., and so had then no connection with any idea of gender. Thus *scriba*, *nauta*, are used perhaps exclusively of males, and in A.-Saxon it is laid down absolutely that all nouns in *a* are masculine (Rask, § 40). Again in the weak declension of the Gothic adj. for 'blind,' the vowel *a* predominates in the suffixes of the masc., *o* in those of the fem.

It has been seen that generally the name for the female is deduced by the addition of a suffix to the name of the male; but there are exceptions, as first in the case of *widower* from *widow*, and G. *Wittwer* from *Wittve*. It was but natural however that the specially unhappy position of a widow, left comparatively helpless with a family, should cause the term 'widow' to be more in request. The widower calls for less pity. The same inversion of the usual order of derivation is seen in *goose*, *gander*, G. *Gänserich*. But here again the housewife's thoughts are more given to the female birds, first as layers of eggs, and secondly as reared in larger numbers.

The German has a series of terms for male birds, *Gänserich*, *Enterich*, *Täuberich*, with a provincial *Bienrich* (*apis mas*), *Braiterich* 'Bräutigam' (D. G. 2, 516); but these Grimm would divide as *Gänse-rich*, etc., and treat the suffix as representing a noun *reiks* (princeps). But surely when he himself quotes a provincial *ganse* and *gander*, as co-existing with *gänserich*, he ought to have seen that the true division is *gans-er-ich*, in which *er* is the ordinary symbol of the masculine, and *ich* a dim. suffix. So too the G. *Hederich* (*hedera terrestris*), which he seems in like manner to refer to the noun *reiks*, but with little support from the meaning, should be divided *hed-er-ich*, where the *er* corresponds to the suffix of E. *heath-er* by the side of *heath*; and the double suffix *er-ich* again agrees with what is heard in *sham-r-ock*. But besides this the form *hederich* is one with the L. *hedera*, so that the *r* cannot by any possibility be deduced from a suffix *reiks*. And further, if my theory as to L. nouns

in *a* (p. 74) be true, the theoretic *hederac-* is in all its syllables one with *hederich*. The Scotch term *laverock*, *learock* in Lancashire, and with us *lark*, corresponding to a Dutch *leeuwerik*, supplies another proof that Grimm's theory is groundless.

This suffix *erich*, so common in the G. names for male birds, takes the form *rake* in our *drake*, which as Grimm points out (3, 341) comes by 'aphaeresis' from a lost *andrake*, corresponding to the old G. *antrēhho* or *antrēhho*, G. *enterich*, prov. *äntrecht*. The Danish term is *andrik*; and in Swedish the very form *andrake* is still retained for the wild bird or 'mallard.' Our decapitation of the word has been perhaps due to a false feeling that the initial *an* was our indefinite article. But it seems to have escaped Grimm that the term *duck* has passed through a similar series of changes. The Danish form is *önd*; but whenever a monosyllabic form with an 'umlauted' *o* presents itself, it may safely be assumed that a following *u* has been lost, as in the O. N. *dör*, by the side of *ðopv*. This gives us *öndu*; but again what I have said of Latin nouns in *u*, as *metu-*, *anu-*, *genu-*, holds in the Teutonic and Scandinavian languages, and hence I infer a fuller form, *önd-uc*, which, subjected to the same decapitation with *andrake*, gives us something like *duck*, so as to justify what I ventured to assert in p. 140, that *anas* and *duck* are in origin one. Let me anticipate a pun that is likely to be made here, that I am making 'ducks and drakes' with etymology.

I return to those cases where the names of the two sexes are said to be unconnected words, and this to set some limits on the doctrine. An Englishman naturally thinks that *sow*, *cow*, *ewe*, carry with them the exclusive meaning of the female. Yet for Greeks and Romans *is* and *sus* were of both genders, applicable to the boar as well as the sow. So again our *ewe* is of course one with Lith. *avi-*, S. *avi-*, Lat. *oui-*, Gr. *ofr-*. But in Homer the word is of both genders, *ois apveios* as well as *ois θηλυς*. So too in the Latin *su-oue-taurilia*, the entire male animal was expressed in the first two elements of the word, *su-* and *oui-*, as much as in the third (Fest. v. *solitaurilia*). Our term *cow* again is generally identified with the S. *gau*; but the latter was used of both sexes. This S. noun is also with reason held to be one with the Gr.

βov-s, *L. bos* (*bou-*); and so probably with our own *bull*, but βovs and *bos* again are at once masc. and fem. The word *mare* is now limited to one sex; but in A.-Sax. *meor* was masculine, and so also the Norse *mar*; and the word enters into the Fr. *maréchal* ‘a farrier’ without any limitation of sex. Nay in Welsh too *march* is the precise name for ‘a stallion,’ and hence *march-asyn* is a ‘male ass,’ and from *on* ‘an ash’ is formed *march-on* ‘the male-ash-tree.’

It is when a special term for the male sex comes into use that the term, originally of common gender, becomes limited to the female. Thus it was to the introduction of the terms *aries* and *uerres* that *ouis* and *sus* owed this contraction of their use; and the reason for this one-sided limitation is not far to seek. When the farmer wishes to improve his breed, economy suggests the purchase of a male in preference to a female; and so the newly-imported beast brings with it its foreign name, which in its own home may well have been applicable to both sexes; and other farmers follow the lead. Henceforward therefore the two sexes will have different names.

In some cases where the names for the sexes seem at first view to be unrelated words, a closer examination will lead to a different result. The terms *duck* and *drake* have already been considered. Γυνή, γυναικος, and ανηρ too have no great resemblance to each other. But the root syllable of *αν-ερ* is *fav*, itself interchangeable with *μav* as seen in *Αναξιμανδρος*, *ποι-μεν-*, *ποιμαινω*, *ποιμανωρ*. But an initial digamma is commonly interchangeable with a γ; and in fact the sex of γυναι-κ- is due solely to the suffix. In the Gothic and A.-Sax. *guma*, N. *gumi*, O. G. *gomo*, whence the compound A.-S. *bryd-guma*, O. G. *pruti-gomo*, G. *Bräutigam*, and with a slight corruption our *bride-groom*, we have the analogue of γυναι, whence γυναι-κ-; and this brings us of course to *hom* of *hom-on*, which also must have been in some dialect of the Latin pronounced with a *w* rather than an *h*, or we should never have had the Italian *uomo*. The French in their *hom dit*, now *on dit*, have preserved the simpler form, from which *hom-on-* is a derivative; and the Latin *ne-mon-* exhibits the same initial nasal, as the assumed *μav* of Greek and our own *man*

(prov. *mon*); so that it is a genuine representative of the G. *niemand* and our own *no-one* (= *no-wun*). I have elsewhere noted that, as we have *one-says*, corresponding to the G. *man sagt*, so in Germany too there once existed a provincial variety *wan sagt*. Thus *one* in the phrases *no one*, *one says*, has only a deceitful resemblance to the numeral; and again is of Saxon origin, not a loan-word from the French *on dit*, though ultimately identical with this *on*. It will be seen too that I wholly reject the doctrine of the Sanskritists that the Gr. *αρηρ* is deduced from the S. *nara* by the addition of a prosthetic *a*. Lastly it is the *ep* of *av-ep-* that is represented by the *on* of *hom-on-*, so that the *mon* of this Latin noun has only an accidental likeness to our noun *man*, with which the first syllable *hom-* is really to be identified.

Son and *daughter*, *ἰος* and *θυγατηρ*, have little resemblance between themselves, and as little to *filius* and *filia*, yet ^{τ'ι'αγ} are all really of one stock. First of all the modern Greek has *θυγος* in place of *θυγατηρ*, and *ἰγιος* as a variety of *ἰος*, the latter occurring, as my friend Dr. Wagner informs me, in: *εἰς ἰγιο πολλὰ κανακισμένο* 'a much beloved son' (in the first canto of the *Erotocritos*, by Vincentio Cornaro, written in the 17th century, printed in Venice, 1817). Another form still current in modern Greek is a decapitated *γιος* from *ἰγιος*, corresponding, as my informant* says, to *δοντι φρνδι*, formed 'per apocopen' from *οδοιτ-οφρνδ-*. Sanskritists deduce their *duhitar* 'daughter,' from a vb. *doh* 'draw' (milk), some making the term = 'milkeress,' so to say, in the sense of 'dairy-maid;' Lassen, I think with more reason, 'suckling.' *Θυγ* of *θυγατηρ* *θυγος* must of course be one with the S. *doh*; and I believe it also to be one with both the Lat. *sug-* and the Lat. *duc-*. Nay the Greek language also possesses the root with an initial *θ* in *θησατο* *θησαμενος*, used alike of the sucking child and the suckling mother, whence *θηλη* 'the nipple' and *θηλvs* 'female,' so that the root syllable was probably *θεγ* or *θαγ*. The interchange of a Greek *θ* with a Lat. *s* is in itself likely, as the Romans had no *th*, and is confirmed by the *θεσ* of *τιθημι* (*τιθεσμι*, cf. *θεσμος*) having the form

* See Tr. Phil. Soc. 1866, p. 5.

ser in *ser-o*, *in-sero*, *ex-sero*, $\theta\alpha\pi$ of $\theta\alpha\pi\tau\omega$ appearing as *sep* in *sep-el-io*. Other examples are $\theta\nu\alpha\epsilon\iota\nu$ *subare*; $\theta\sigma\sigma$ of $\theta\rho\omega\sigma\kappa\omega$ = *sal* of *salio*, together with *sor* of *sors*, that which ‘leaps’ from the urn in casting lots; $\theta\epsilon$ of $\theta\epsilon\alpha\sigma\mu\alpha\iota$ compared with our own *see*, G. *seh-en*, a root which is the base of $\sigma(\epsilon)\kappa-\epsilon\pi\tau\omega$ and of $s(e)c-io$ ‘know,’ and only slightly modified in $s(e)p-ecto$, softened from *sek-ekto*. $\text{A}\tilde{\text{u}}\text{t}$ even in Greek the Grammarians give $\sigma\alpha\omega$, $\sigma\epsilon\iota\sigma$, $\text{A}\sigma\alpha\nu\alpha$, as Laconian varieties of $\theta\alpha\omega$, ($\theta\alpha\sigma\mu\alpha\iota$ ‘I see’), $\theta\epsilon\iota\sigma$, $\text{A}\theta\eta\nu\eta$. Then again the identification of *sugo* with *duco*, as regards the interchange of the initial consonants, has its parallel in *signum* by the side of *dico* (‘show’), and in $\sigma\eta\mu\alpha$ ($\sigma\epsilon\gamma\mu\alpha$) by the side of $\delta\epsilon\iota\kappa\nu\nu\mu\iota$ (cf. $\epsilon\delta\epsilon\chi\alpha$ of Herodotus). Then as regards the limitation of meaning from ‘drawing’ generally to ‘drawing milk,’ compare the Fr. *traire* from *trahere*, and the Greek $\epsilon\lambda\kappa\epsilon\iota\nu$ *μαστον*, as also such a phrase as Ovid’s “materna rigescere sentit Vbera, nec sequitur ducentem lacteus umor.” To identify $\iota\upsilon\sigma$ and the Sp. *hijo* is no new assumption, but as the *j* in this Spanish word is really a guttural aspirate, it is confirmed by the guttural in the modern Greek $\iota\gamma\iota\sigma$; and again the loss of a Gr. guttural between vowels has its parallel in the provincial $\omicron\lambda\iota\sigma$ for $\omicron\lambda\iota\gamma\sigma$, as also in the noun $\sigma\tau\omicron\iota\alpha$, literally an adj. for $\sigma\tau\omicron\gamma\iota\alpha$ (sc. $\omicron\delta\delta\sigma$) ‘a covered (way),’ from $\sigma\tau\epsilon\gamma-\omega$ (cf. *pulegium*, *puleium*). But the Sp. *hijo* on all hands is admitted to be one with the Lat. *filius*; and indeed as far as the liquid is concerned, this is confirmed by the Sp. *muger*, *ageno*, corresponding to *mulier* and *alienus*. Under Comparatives I had to speak of the forms $\mu\omicron\gamma\iota\varsigma$, $\mu\omicron\lambda\iota\varsigma$, and $\mu\omicron\gamma\omicron\varsigma$ of $\mu\omicron\gamma\omicron\sigma\text{-}\tau\omicron\kappa\omicron\varsigma$, and expressed the belief that $\mu\omicron\gamma\iota\omicron\varsigma$ must have been the earlier form of this comparative adverb, which then might well pass into $\mu\omicron\lambda\iota\omicron\varsigma$ and so to $\mu\omicron\lambda\iota\varsigma$. But an *l* in such forms as the Lat. *alius*, *folium*, had but an obscure sound, probably that of the *l mouillé*. This, so near a *y*, is all but the same as in $\iota\upsilon\text{-}\omicron\varsigma$, for so the syllables should be divided—*hóo-yos* or *hý-yos*. The pronunciation of the word, so common in England, as *why-os*, damages the metre in such endings as $\alpha\gamma\lambda\alpha\omicron\varsigma$ $\iota\upsilon\omicron\varsigma$. Now as *g* is habitually in language slipping into a *y*-sound, *gestern yesterday*, *gate yate*, we see what causes the interchange of a *g* and an *l* between vowels. The initial vowels

of *υιος*, *θυγατηρ*, and *filius*, claim a word or two. In the first place the *υ* in the first two is sometimes long, sometimes short in Homer; and though *filius* has a long *i* in classical Latin, this must have been shortened before the *mouillé* sound of the It. *figlio*, and the Fr. *fille* became possible. But a Gr. *υ* soon became a mere *i*, as it now is in modern Greek; and as it was when the Fr. adopted its representative *y* under the name of *y grecque*. Hence the *i* of *filius* and *hijo*. Lastly for the interchange of a Gr. *θ* with a Lat. *f* see the bottom of p. 178.

There remains our own term *son*, G. *Sohn*, a word once widely spread, as it occurs in the form *sunus* in Sanskrit, Lithuanian, and Gothic; and in the two former, as also in the O. Pr. *soun-s*, the first vowel is long, as it also is in the G. *Sohn*. It may therefore well be that the word is compressed from a fuller *sugnus* or *sucnus*, and so be a derivative from such a verb as *sugo*. Those who looking to *θυγατηρ* alone find a satisfactory explanation in the notion of 'one who milks the cows,' will hardly contend that such an occupation belonged to the sons. But the idea of 'suckling' is of course applicable to both; and children are more likely to have obtained their names from some relation to the mother, when the tie of paternity was less cared for. The immediate relation of a child to its mother is best exhibited as her 'suckling.'

There is absolutely nothing in common for the eye or ear between *γαμβρος* and *υιος*; but something of similarity shows itself in the comparison of the corresponding Latin forms *gener* and *nurus*; and the Fr. *gendre* helps to connect the forms *gener* and *γαμβρος*, the latter being without doubt the more genuine, as it is an easy derivative from the Gr. stem *γαμ* of *γαμος*. It is then all but certain that *nurus* is cut down from a lost *gonurus*, first shortened to *gnurus*. Of such truncation we have familiar examples in *nascor* for *g(e)n-ascor*, in *nosco* for *g(o)n-osco*. Thus *υιος* would stand for an older *γoivos*, and that for *γoivivos*. The S. *snushā* and A.-Sax. *snoru* already tell us that *nurus* and *υιος* have undergone some loss from the beginning; and although the initial *s* of the Sanskrit term is not the palatal letter which habitually interchanges with a *k*, I must hold that in this word

it must have superseded a guttural. The final *u* of *nuru-* as compared with the final *o* of *genero-* corresponds with *soc(o)ru-* by the side of *socero-*. Strictly speaking the four words must have been *socoruc-* and *soceroc-*, *gonuruc-* and *generoc-*.

What has been just seen convinces me that *anu-* and *senec-* are also related words, the first having superseded an older *san-uc-* or *son-uc-*, the *c* of which is preserved in *anic-ula*. The loss of the sibilant in *anu-* has its parallel in the Gr. *ενη και νεα*, where theory would have preferred *ἐνη*.

The Latin *uxor* seems at first sight to be an isolated word without any satisfactory derivation, for we need not stop to consider the idle theories of Servius and Donatus* who endeavour to connect it with *ungo*. Already in p. 46 I noticed that when a Latin word in the first syllable contains a *u* followed by two consonants, it has generally resulted from the compression of two syllables, the first of which contained an *o*, the second a *u* dividing the said consonants. As applied to *uxor*, this suggests a form *ocusor*; and as a L. *c* usually corresponds to a Gr. *π* I come upon the verb *οπυω* or *οπυω* of the old Greek poets with a meaning well suited. But verbs in *v*, as for example *arvω*, have grown out of older forms in *υσσ υττ* or *υχ*, so that the first two syllables of *ocus-or* are accounted for. But the same language has a decapitated variety of the same verb in *κυ-ω* for an Ionic *οκυω* of the same meaning, for both the simple verbs have a special reference to the man, while the reflective or passive is limited to the woman. It may be thought at first that the suffix *or* should denote an agent, but in this sense it is strictly limited to the masculine. My own belief is that the *or* of *uxor* like that of *sor-or* is in origin and power identical with the *er* of *pater*, *mater*, *frater*, being a diminutival suffix of affection, like the *chen* of the G. *Mütter-chen*, the *ie* of the Scotch *wyfie*. The difference of vowel may well be due to assimilation, seeing that an *o* accords with the preceding vowels in *sor-or* and *ux-or*; and indeed in the Ital. *sorella* the proper vowel reappears, as in *fratello*. But of *οπ-υω*, and the theoretic *οκ-υω*, *οπ* or *οκ* is the root; and the former may very possibly be akin to our *wife*, for the *f* of this word

* See Tr. Ph. Soc. 1868-9, p. 259.

obeys the law of Rask, and an initial *o* commonly points to a lost digamma, as in Sp. *Huesca Osca*, *hueso os* (*ossis*), *huevo ouum*, *huevo οπη*, *huerfano ορφανος*, *huiz os* (*oris*) ; Dan. *ord*, *orm* = E. *word*, *worm*. It has been objected to this explanation of *uxor* that it would have been equally applicable, had it signified 'a husband.' This is true, except that a diminutival suffix is better adapted to the wife ; and further, although *coniux* also might, as far as origin is concerned, have been applied to the male, yet in fact it is almost exclusively applied to the wife.

Grimm observes (3, 321) that nouns in themselves feminine, when applied, as occasionally happens to males, take the masculine construction, and he quotes as an instance *tre-telgia* 'a tree axe,' which when applied to a *faber lignarius* becomes at once masculine. Another example given by him is *nullus potestas* in a document of 1033, corresponding to *den Potestât* in an old German chronicle, and *der Podestà* in modern German. He might have added that in Italian also *podesta* 'power' is feminine, but as used of a magistrate masculine. So with us *ensign* and *cornet* originally meant what those officers carried ; but when used as titles of the officers themselves no longer admit the neuter gender.

So much for natural gender or sex. The extension of the idea to non-living objects is no doubt due to the poetical influence of association. A skipper separated for a time from his family transfers his thoughts and affections so to say to his ship ; and he speaks of that ship as *her*. So the gamekeeper with his gun, the woodcutter with his axe. In the French navy it is said to be the practice to give male names to line-of-battle ships, female names to frigates. Again the earth, as a sort of universal mother, may well be so personified, as when Columella says : *Alma tellus annua uice uelut aeterno quodam puerperio lacta mortalibus distenta musto demittit ubera*. Hence the feminine gender usually attaches itself to this idea as in *terra*, γαῖα or γῆ, Lith. *zieme*, Pol. *ziemia*, Go. *airtha*, A-Sax. *eorðe*, G. *erde*. To the same principle is due the sex attributed to trees as δρῦς, φηγος, *quercus*, *ulmus*, *pirus*, *malus*, *arbutus* ; and in the same way the produce of trees, as their children so to say, are for the most part neuter, as *pirum*, *malum*, *arbutum*.

From the same point of view which leads to the personification of the earth as a female, we might have expected that the sun as the vivifier of vegetable life would have been regarded as a male; and such is the prevailing feeling in our own language, as also in Greek, Latin, French, etc. Yet the old Teutonic fable speaks of *Mundilföri* having two children, a son *Mani* (the Moon), and a daughter *Sol*; and accordingly the feminine gender belongs to the Go. *sunnō*, O. G. and O. Sax. *sunna*, A.-Sax. *sunne*, Norse *sol* and *sunna*, Swed. and Dan. *sol*, G. *Sonne*, D. *zon* and *zonne*. Scarcely less strange is it that the moon, feminine with us, as again in Greek, Latin, French, etc., and as the feeling of most persons might have expected, seeing that it is the lesser light, and holding this light from the sun, yet in the same fable and consequently in the Teutonic domain, passes for a male, as Go. *ména*, O. G. *máno*, A.-Sax. *móna*, N. *máni*, G. *Mond*, Sw. *måne*. Occasionally indeed the other gender shows itself as in the Dutch *maan*. The Lithuanian takes the same anomalous course with the German family, making *saule* fem., *menù* masc. May all this be due to the fact, that to the northern nations the moon in the months of winter is a more constant friend than the sun?

A river by virtue of its power and violence is entitled to be personified as a male, as is generally the case both in pictorial symbols and in grammatical gender, as *Tiberis*, *Arnus*, *Eurotas*, *Peneios*. So too with the generic terms *ποταμος*, *fluvius*, *amnis* (but *flumen* n.). Occasionally the name given to a river seems to be an adj. rather than a sb., as *Ariminus*, *Volturnus*, the neuter forms *Ariminum*, *Volturnum*, referring to some such noun as *oppidum* or *castellum* understood. (Cf. *Eridanum ostium*, Plin. 3, 16; *Volturnus amnis*, Liv. 23, 19; *Volturnum oppidum*, Plin. 3, 5, 9; *flumen Rhenum*, Hor. ep. 2, 3, 18.) A wind is no less entitled to be ranged with masculines; and accordingly the generic terms *αεμος* and *ventus* are masculine and the same holds of the special terms *Boreas*, *Notus*, *Eurus*, *Aquilo*, *Auster*, *Favonius*, etc. A mountain again on account of its size seems entitled to a place in the same category; but here the facts are not in strict agreement with the theory, as witness *Olympus*, *Ossa*, and *Pelion*.

There is no difficulty in the use of male and female as applied by us to the 'screw,' and in some German dialects to the hook and eye (*Haken* and *Oehre*), or to the gender of *μύλη*, the fixed nether stone of a mill, as opposed to the upper moveable *μύλος* (Grimm, 3, 359, note).

Grimm observes (3, 355) that the modern poets of Germany habitually represent all the faculties of the human soul, all the virtues and vices, all the arts and sciences as feminine; and the same to a great extent was the habit of the Greeks and Romans. In such words as *pudor*, *honor*, *timor*, an opposite bias was perhaps felt owing to the suffix, shared by them with *actor*, *orator*; but in the passage into the French language the anomaly was corrected, as in *la pudeur*, etc.; and *bonheur*, *malheur*, are no exceptions, as these represent *bonum* and *malum augurium*.

But within the limits of grammatical gender caprice has much play; yet even caprice has its laws. It is difficult to say why a metal should be masculine, yet in Greek we find *χρυσος* *αργυρος* *χαλκος* *σιδηρος* *μολυβδος* *κασσιτερος*. On the other hand the neuter is consistently preferred in the Latin *aurum* *argentum* *aes* *ferrum* *plumbum* *stannum*.

But it seems an idle matter to follow all the ins and outs, where little of principle prevails, and Englishmen may perhaps congratulate themselves that they have done more than any other member of the Indo-European family to stamp out what I may call a disease of language; and at any rate we may be contented to balance the compliment against the censure of Grimm (3, 345), when he speaks of our language as in form the least poetical.*

* In the chapter on Pronouns of the third person I have given my reasons for believing that the final *d* of the Latin *quid quod id illud* etc., the *t* of E. *what, it, that*, etc., the *s* of G. *was es das*, is not a suffix at all, but a representative of the final *n*, which in the outset belonged to the theme of all these words, the habit of language being to denote a neuter by the simple omission of suffixes employed for masculine and feminine.

CHAPTER XXVIII.

PARTICLES—PREPOSITIONS.

UNDER the head of Particles are included Prepositions, Adverbs, Conjunctions, and Interjections, as subject to little or no change of form, and so distinguished from Verbs, Substantives, and Adjectives. Thus Varro divides words into two classes or genera: “unum fecundum quod declinando multas ex se parit disparilis formas, ut est *Lego*, *Legis*, *Legam*, sic alia: alterum genus sterile, quod ex se parit nihil, ut est *Etiam*, *Vix*, *Cras*, *Magis*, *Cur*.” But his distinction is not altogether precise, for adverbs have their comparatives, superlatives, and sometimes their diminutives; and the same to a certain extent may be said of prepositions. But if his limitation tend to shorten discussion, on the other hand the origin of particles is often a matter difficult to investigate, and the varying uses of prepositions in particular involve problems of the most subtle nature, especially when considered under their twofold use, as prefixed to nouns and to verbs. I begin this part of the subject with prepositions.

Before I proceed with the examination of this class of words, it seems important for me to protest against Bopp's doctrine, in which he has many followers, that all original prepositions are derived from what he calls Pronominal roots (V. G. § 105, p. 194) as opposed to his Verbal roots; and in § 115 he says much the same of case-endings, which indeed have precisely the same power. Nay he and his followers seem to be under the impression that it would be impossible to find roots of the latter class from which words denoting prepositions could be deduced. As regards case-endings I have already in my Essays pointed out that Prof. M. Müller in his Lectures (p. 221) himself explains

the instrumental of Chinese as formed by *y*, an old verbal root meaning 'to use'; and this is of course quite satisfactory, for 'beat donkey use stick' is only another way of saying 'beat donkey with a stick.'* So again *tei* in the same language, says Prémare, is at once a symbol of the genitival relation (*of*) and a verb = 'proficisci.' Then of the particles more formally called prepositions not a few imply motion, and so in idea are one with verbs. The Latin *in* (*en*) for example has for its primary meaning 'descent,' so that the derivative *imus* for *in-imus* means 'lowest,' and the Gr. *εν-εποι* 'those below'; and again the L. adj. *in-curuos* means 'bent down,' as opposed to *re-curuos* 'turned up.' The L. *ob* and the Gr. *επι*, akin to it, originally denoted 'after,' and so are no doubt of the same stock with *ἐπομαι*, *sequor*, *socius*, and without the sibilant or aspirate *σπαδος*, *σπαων*, *οψε*, etc. *Av*, the stem syllable of *ava*, denotes 'ascent,' and may possibly be akin to L. *alo* and *ard-uns*, Gr. *αρω* (root *ap*); but whether this etymon be valid or not, there is no difficulty as to the unity of the ideas. Similarly *sub* likewise had 'up' for its primary meaning, as clearly appears in *superi* and *summus*, and very generally in verbs, and here I may observe that it is in composition with verbs that the true power of a preposition is best seen.

As I assigned a sort of primogeniture among verbs to those which carried with them the idea of motion, so when a preposition practically unites the two ideas of motion and rest, I give precedence to the former. Thus in the case of the prep. just mentioned, when *sub muro esse* 'to be under the wall,' and *sub murum ire* 'to go up to the wall,' are contrasted, and a doubt is raised as to priority of meaning, I have no hesitation in giving my award in favour of the latter. In fact ascent is often checked by some opposing obstacle, and then with rest comes in the idea of 'under.' Take again the idea of 'down.' Here too motion may come to an end, owing again to some obstacle, and thus *in terra* means 'on the ground'; or if the obstacle should

* This seems to suggest the question whether our own *with* can be connected with the Lat. *ut-or*?

still be insufficient to stop the motion, we have *in terram ire* 'to go into the ground'; and if after this the motion cease or be lost sight of, we have the idea of 'und-er the ground'; and this *und-er* is a comp. of our *on*, and virtually one with *εν-επο-*, the *d* being excrescent. Precisely in the same way, *sup-er* is a comp. of *sub*, as *over* is of our *up*, so that here we have an expression which denotes 'a higher position,' i. e. 'above.' A third example of this kind is seen perhaps in the L. prep. *ad*. This seems to be one in form as well as meaning with the G. *an*; and thus while *ad* implies first of all 'motion toward,' as soon as that motion ends in reaching the object aimed at, we have the state of rest expressed in 'before' or 'presence,' as in the verb *ad-esse*, to which *prae-sens* serves as a participle; and thus my suspicion gains strength that *ante* is allied to *ad*. Similarly the prepositions *προς* and *προ*, all but identical in form, have respectively for their chief meanings 'towards' and 'before.'

As the leading use of prepositions is to denote the relations of place, and the earth is the object to which reference is commonly made, as is clearly seen in the ideas of 'up' and 'down,' we must not be surprised to find the ideas of 'out' and 'up' combined in the L. prep. *ἐκ* (*ē*), as in *escendere*, *euadere*, *existere*, *ecferre*, *elatus*, compared with *exire*, etc. In fact we have here a counterpart to the S. *nī-gam* 'to go down' or 'to enter,' as also to the double power of the Gr. *δύω*, which is probably a variety of *νέω* (*nuo*), and so of the same stock with the S. *nī*.

So much for the general meaning of prepositions. As regards form we should start from those of monosyllabic character, as L. *ab*, *ad*, *am*, *cum*, *ec* (*ē*), *por*, (*por-rigo*), Gr. *εκ*, *συν*, together with *αν*, *παρ*, *κατ*, for I cannot but doubt the usual doctrine, that these are formed by apocope from *ava*, *παρα*, *κατα*, as generally taught, especially by Ahrens (de dial. Dor. p. 353, § 43) and Buttmann (Gr. § 117, Anm. 4). But I would exclude from the list of original monosyllabic prepositions all those which begin or end with two consonants, as *abs*, *obs* (*ostendo*) *subs* (*sustollo*), *ex*, *trans*, *prae*, *pro*, *uls*, *eis* (*εἰς*), *ἐξ*, *αψ*, *προς*, *προ*, inasmuch as these will be found to have been disyllabic in origin; and over and above these several which are now monosyllabic, but origin-

ally not so, viz., *dis*, *de*, *per*, *re*, *pos* (*post*), as will appear in the sequel.

I take next into consideration the disyllabic forms. In the case of *super*, *inter*, *subter*, *praeter*, *ὑπερ*, G. *über* from *auf*, *unter* from *ein*, *unter* (insep.) from *ent* (insep.), *wider* from *mit* (= E. *with*), E. *und-er* from *on*, *ov-er* from *up*, *aft-er*, we see a comparativel suffix, well suited to express the comparativel idea involved in such words; but the *t* in *inter* and *subter* is excrement, while *praeter* derives its dental from *praed*, the older form of *prae*, as seen in the archaic compound *praed-opio*, for whose existence we have the evidence of Festus (p. 205, l. 13, ed. Müller); for there can be little doubt that we should here read, as Müller proposes, *praedopiont* (M.S. *praedotiont*) *praeoptant*, or with Ritschl (op. alt. 564 note): *praedoptiont pr.*

I would next call attention to the fact that in the Greek disyllabic prepositions the principle of vowel-assimilation is strongly marked. In *ava*, *κατα*, *παρα*, the two syllables have an identity of vowel; as also in *προ*, standing as it does for *πορο* (cf. L. *por* and *pro*); while the vowels in *μετα* and *περαν*, though different, are neighbours in the natural gamut *i*, *e*, *a*, *o*, *u*. In *ει*, *επι*, *περι*, we have neighbour vowels of the weak order, and in *απο*, *ὑπο*, neighbour vowels of the strong order. *δια*, *αντι*, and *αμφι* indeed, are exceptions to the law, of which *δια* shall soon be dealt with; and as regards the two others I fall back upon a principle which I am not now asserting to serve the purpose of the moment, for it was already put forward in a paper published in the 'Proceedings' of our Society (vol. 5, p. 191). To the instances *νομο-* m. and *νεμεσ-* n. (p. 203) I appended this note: "Yet the interposition of a double consonant seems to stop the current of attraction. Thus we have *κλεπτης*," whereas the forms *νομη*, *γωνη*, might have suggested a form *κλοπτης*. But if the final vowel in the eleven prepositions just enumerated has been determined by the law of assimilated vowels, it is possible that the suffixes in all of them may be of the same origin. I proceed then to examine these suffixes in some detail.

By the side of *αμφι* we have a variety *αμφις*; and so far from

placing *αμφις* below *αμφι* in honour, because the former is limited to epic and lyrical use, I at once award it precedence, if only because poets, and especially poets of the higher class, are sure to retain old forms longer than other writers. But I place also no little reliance on the doctrine that greater fullness is itself an evidence of greater antiquity, seeing that words wear away instead of the reverse. Hence too I hold *μεχρις* and *αχρις* as more genuine than *μεχρι* and *αχρι*; and have little respect for the usual assumption that the *σ* in these words was added, *hiatus uitandi causa*, or *metri gratia*, or due to poetical licence. In the case of *αμφις* indeed such pleas are not I believe put forward; but if they were, it would be enough in answer to point to *αμφισβητω*. The analogy of *αμφις αμφι*, *μεχρις μεχρι*, *αχρις αχρι*, suggests the question whether *ενι*, *επι*, *περι*, may not have lost an *σ*, and as regards the last two I find an affirmative argument in *περισ-σειω* (Il. 19, 382; 22, 315), and in *επισ-σειω*, *επισ-σενω*, the only forms known to Homer. It must be admitted however that the augmented tenses of *σενω* often take a double *σ* independently of any preposition. But the form *επις* for *επι* receives further confirmation from the allied adverbs *οπισ-ω* and *οπισθεν*, for we have here well-known suffixes appended to *οπισ*. Then as regards *ενι*, I find what I desire implied in the compressed *ενς* (*εις*). Nay more, as the S. prep. *ni* 'in' or 'down,' as seen in *ni-dhá* 'depono,' *ny-as* 'deicio,' and the Ossetic *ny* of *ny-fyssyn* 'write down,' *ny-væryn* 'lay down,' is but a decapitated *ενι*; so the Slavic *niz-lozhít* 'to lay down,' *niz-padat* 'to fall down,' and the vb. *niz-ít* 'to lower,' give us our particle with a final sibilant; and this sibilant again is represented by kindred dentals in our own *neath* and *neth-er*, G. *nied-er*, and Norse *nid-r*. And all of these are proved to be derivatives from a root = *εν* or *in*, both by their meaning and by the varying forms of the Gr. *ερεθε* and *ρεθε*. *Cis* and *uls* I am inclined to regard as compressed from *cit-is* and *ult-is* (cf. *citerior*, *ulterior*).

But if a suffix *is* be thus established for prepositions, the question follows, what is its meaning? and after what has been said above of *er* as a comparativel suffix of prepositions, and in p. 258 of *is* as a comparativel suffix of adjectives and adverbs,

and this especially favoured by Greek forms, we are driven to the conclusion that in prepositions also *is* and *er* are practically identical. After giving this explanation in my paper on Gr. and L. prepositions in our Transactions a few years ago, I found that Mommsen (Unterital. Dial. p. 306, v. *op*) compares the suffix of *abs* with that of *magis*; and again (p. 246, v. *az*) he sees 'eine comparativische Bildung, in *subs* εἰς *obs* αμφίς.'

But although for *ava*, *κατα*, *παρα*, *π(ο)ρο*, *επι*, parent monosyllabic forms from ^{αχ}what they have been deduced have been assigned, there remain others for which such an origin has yet to be supplied. For *απο* and *ὑπο* we need but point to the L. *ab* and *sub*, E. *up*, G. *auf*. *Περ* of *περι* must be one with *cir* of *circum*, i. e. one with *cur* of *curro* 'revolve' (p. 8). *Επι* is a secondary form of a prep. = L. *ob* and E. *aft*, the *t* of which is excrecent (s. Essays, p. 121). Then *αμφίς* (*αμφι*) has its origin in some monosyllable = L. *am*, G. *um*, Erse *imm* (or *im*), as *im-du-chenn* 'circum caput tuum,' *him-chenn* 'circum caput' (Ebel. p. 654), O. W. *am* (ib. 674), as *am penn* or *am benn* 'circum caput.'

The secondary form *αμφι* has its analogue in the Erse *imme*, O. G. *umpi*, A.-S. *ymbe* (s. Grimm, Gr. 3, 256); and to the yet fuller *αμφίς* corresponds a form with *r* in the Umbrian *ampr* or *ambr* of *ampr-ehitu* = 'ambito' (A. K.'s Sprach-D. p. 142, l. 11), *ambr-etuto* = 'amb-eunto' (142, l. 22), *ampr-efus* = 'ambinerit' (146, l. 10), *ambr-efurent* = 'ambinerint' (145, l. 23). So also Mommsen (Unterital. Dial. p. 249, v. *amfret*).

But the Latin also has the comparativel form in *amfractus*, erroneously referred to a non-existing verb *anfringo*. Varro already set etymologists on a wrong scent (l. l. 7, 2; p. 300, Speng.) when dealing with a poetic phrase, *terrarum amfracta reuisum*, he wrote: "Amfractum est flexum ab origine duplici dictum, ab ambitu et frangendo." I have little doubt, that the word is a compression of *amber-actus*, so that the second part of it comes from *ago*. This agrees with the use of it for the sun's revolution in his orbit in: "cum aetas tua septenos octiens solis amfractus reditusque conuerterit" (Cic. N. D. 2, 47), and in the religious ceremony of the *ambarualia*: "in annuis amfractibus"

(Leg. 2, 19), *i. e.* in the very sense so frequently occurring in the Umbrian inscriptions just referred to. Cæsar too (B. G. 7, 46, 1) says: "muris recta regione si nullus amfractus intercederet, mille passus aberat." See also Liv. 29, 32, 5; 38, 7, 3 and 38, 45, 8. Pliny again (11, 124) has: "dedit (natura) ramosa (cornua) capreis, convoluta in amfractum arietum generi." But the word is used not merely of physical windings but also of roundabout language in Cic. Div. 2, 127, thus reminding us of a similar use of *circumitio* in Terence, and of *amb-ages* (note the word) in many writers.

The particles *ὑπο* *απο* *προ* may be taken next; and as the last is evidently but a shortened form of *προς*, it may safely be assumed that the others have lost a final sibilant, which will be parallel to what we have seen in the class of prepositions just considered, where *is* gave place to *i*. Further the prep. *προς* has for its analogue in Erse the double form *fres* and *fri* (Ebel 648); and a like double form is seen in the Erse prep. *tri* or *tris*, with the meaning of *per*, and in the L. *di*, *dis*. When we call to mind then, that the comp. suffix of adjectives was *ios* or *iov*, of which now the *i*, now the *o*, was dropped, we may treat as substantively one all the forms *προς*, *πρῦν*, *παρος*, *pris* of *pristinus*, Erse *fris*, and *prius*, all deduced from something like *πορ-ιος* or *πορ-iov*, while *ὑπο* and *απο* have a suffix originally the same.

My next business is to deal with the suffix *a* of Greek prepositions; but here I must first redeem my promise with regard to *δια*, as being apparently formed in violation of the law of similar vowels. Now this particle has for its analogue in allied languages L. *dis*, G. *zer*, O. N. *tor*, and in A.-S. and E. *to*; and to the examples given in the 'Essays,' p. 54, I will now add from English: *to-break* Judges 9, 53; and then from Chaucer: *to-brest* v. 2613, *to-hewe* 2611, *to-race* 8448, *to-rend* 15511, *to-shred* 2611, *to-skater* 7551, *to-swinke* 12453, *to-tere* 12563; while Shakspeare has *to-spend* and *to-perish*, as quoted in the 'Essays,' p. 102. In the use then of this preposition we find the meanings 'in two' and 'in pieces,' together with the metaphorical use of general intensity. Of these the first is the simplest and so entitled to precedence, so that we can scarcely refuse to accept

the usual derivation from *duo* 'two'; and as the numeral adverb *dis* is held to be a corruption of *duis* (cf. our *twice*), so the prep. *dis* *δια* must be regarded as representing more genuine forms *duis* and *δυ-ια* = *duya*, or *δοια* = *do-ya* (cf. *δωω*); and thus the Gr. prep. is no longer refractory.

To proceed then with the prepositions which end in *a*, I first again appeal to the doctrine that longer forms claim priority in the eyes of a philologist, and so give a preference to *παραι*, *μεται*, *δαι*, over *παρα*, *μετα*, *δια*, and to *καται*, as seen in *καταιβατης*, over *κατα*, not forgetting *ἵπαι*, *ἀπαι*. Further we may safely identify the L. *prae* with *παραι*; but this *prae*, as was just noticed, had a fuller form *praed*. In the next place, seeing that a thick mute at the end of a L. word seems to have been a thin letter in pronunciation (cf. *ab*, *ob*, *sub*, with *απο*, *επι*, *ὑπο*, *super*), *praet-er* owes its *t* to the *d* of *praed*. I am thus reminded of Gr. forms like *πεπαιτερος*, *οψιαιτερος*, and other Attic comparatives so ending, which in Ionic and Doric have the more regular form *-εστερος*, the change being much the same as heard in *fenestra fenêtre*. The Latin too (s. chapter on Comparatives) has forms all but identical in *sinister*, etc. corresponding to the Gr. *αριστερος*, etc.; but these have two suffixes of comparison, so that *παρ-αι* and like forms have a corrupted suffix of comparison, virtually one with the *ι* of *επι*, etc. The so-called adverb *παλαι*, so like *παραι* in form, is also akin in power, both denoting the idea 'before,' the one of place, the other of time; and *παλαι* again has a comp. *παλαιτερος*. Thus *παλαι* and its adj. *παλαιος* contain a comparativial suffix. *Γερων* I have already claimed for a comp.; and I now add *γεραιος*, with the hypertrophic comp. *γεραιτερος*; and here *γερων** stands to *γεραιτερος* precisely as *πεπων* to *πεπαιτερος*.

I take next the L. prepositions in *a*, which differs from the Gr. suffix *a* in being long; and again I look for fuller forms and find them in *extrad*, *intrad*, *suprad*, etc. Ritschl in his recent 'Essay' on final *d* holds these words to be ablatives, but he does not show how this case-ending is suited to the idea. A final *d*

* For the *τ* of *γεροντος*, etc., see above.

in Greek is unknown, and in Latin somewhat rare; and indeed seems to have supplanted the liquid dental. Such at least was my contention in the cases of nenter pronouns, *id quid quod illud istud* (s. Chap. on 3rd person pronouns). For the prep. *ad* 'to' again I have claimed *an*, as an older form; and similarly in the paper on *ava* (Essays, p. 12) I have given my reasons for believing that the prefix of *ad-olesco*, *ad-imo*, *ad-aresco*, etc., is one with *av* 'up.' The so-called conjunction *sed* is justly held by Ritschl (opusc. phil. p. 564) to be one with *se*, meaning I suppose both the prep. *se* 'without,' and the prefix *se* 'apart' of *sciungo*, etc. But if so, I am disposed to believe that the *d* is a substitute for an *n*, relying on the form *sine*, the G. *sondern*, and our own *sunder*, in which the *d* is excrecent. The L. *mercennarius* has the liquid in place of the *d* of *merceed*.

Then again compare the Greek *βαδος βαδίζω* by the side of *βαινω*, *επράδαται* from *βαινω*, *ελληλεδατο* from *ελαννω*, *κεκαδμενος* from *καιννμαι*, *φραδ-* of *πεφραδμαι*, etc. from *φραζω* as akin to *φρεν-* (*φρην*). In p. 278 are given several examples, where an E. *d* corresponds to a L. *n*, as *bonus* good, L. *men* of *mens*, E. *mood*, etc. So the Gr. *συν* takes in Welsh the several forms *cym*, *cyn*, *cyd*, and *cy*. And in all these the *d* closes the syllable. With these facts before me I ask myself whether the final *d* of our prepositions has a similar origin; and an affirmative answer is given by *extran-eus* from *extrad*, and by *interan-eus* from *int(e)rad*, for *eus* is a genitival suffix of the Latin already dealt with (pp. 74 and 252). Compare too Ital. *sorrano*, *soprano*, with *suprad*, *avta* with *avτην*.

But assuming that *an* is thus shown to be the truer form of the suffix *extr-a*, *intr-a*, etc., what is its power? Once more I venture to throw out a suspicion that it is comparatival, relying partly on the Greek words *περ-ᾶν*, *περ-ῆν* (= S. *param*) 'over'; partly on *αγᾶν* 'too much'; *λιᾶν*, *λην* 'overmuch,' all of which have the comparatival idea; nor can I see what justification as to the power of the words can be given by those who hold *περαν* and *αγαν* to be mere accusatives of nouns *περη* and *αγη*. With these particles in *ᾶν*, *ῆν*, must be included *avτην*, called like them an adverb, but really, as I have just said, one with *avta*, itself both adv. and prep., and one also with *avτι*. The S. suffix of

comparatives we have seen is *íyán* or *íyans*, and we have had abundant examples of the loss of an *i* in comparativial forms. But what right have I to draw inferences from Greek and Sanskrit in the treatment of Latin particles? and to this I reply that the very form *περην* appears in the L. *peren-die*, a word formed on the same principle as the G. *über-morgen*. Nor need we go to foreign lands for the origin of *peren*, for as the L. prep. *per* first signified 'over,' and is in fact a decapitated *super*, so a form *superen* cut down in the same way gave origin to the genitival form *supern-ě* 'from above,' the suffix *ě* of this word being the same that we have in *ind-ě*, *und-e*, *οπισθ-ε* shortened from *οπισθ-εν*, so that the short quantity of the final in *supern-ě* is not, as is commonly said, anomalous. But I go farther and see a still closer approach to the suffix of Sanskrit comparatives in the L. *trans*, as standing for *per-ans* (s. Essays, p. 111). But the combination *ns* generally ends in the disappearance of one of the letters. Thus we find in Welsh *tran-noeth* 'trans noctem' or 'cras,' and in Breton *tron-nos* the same, where the *n* is preserved; and again in the Welsh *trus yr mynyd* or *dros vynyd* 'trans montem,' where the *n* is lost but the *s* preserved (Ebel, p. 681). The Latin goes further, dropping both *n* and *s* in *trā-do* *trā-duco*, thus bringing us to a form parallel to what is seen in *suprā*, etc. Nay *περαν* itself is cut down to *περā*.

But there are other prepositions which end in *d*, as *prod* (*prod-ire*), the older form of *pro*; and *apud* with its archaic variety *apor*, still more clearly of comparativial origin; and this may well be one with S. *abhi* 'near,' as standing for *abh-is*. Add *postid* as seen in *postid-ea*, and *antid* of *antid-ea* and *antid-huc*, whence came the ordinary form *ante*, just as *avti* implies perhaps an older *avtis*. *Re* again had an older form *red* (*red-do*, *red-duco*, *red-eo*); and this probably was decapitated from a lost *er-el*, the root syllable still surviving as a G. prefix in *er*, as seen in *er-steigen* 'mount up,' *er-halten* 'sustain,' for 'up' was the original meaning of the G. *er* and L. *re* (Essays, p. 86).

There remains yet another disyllabic preposition for consideration, viz., *sine*. Here the old Span. *sines*, old Prov. *senes* (Diez Wörterb. p. 315) seem to have inherited an earlier form, for

I cannot adopt Diez's doctrine implied in the words 'mit angefügtem s.' So the French has still a final sibilant in its *sans*. Probably too the French has preserved the original vowel, for the Gr. *avis* of the Boeotic dialect, = *avev*, has the same power, while the Latin habitually substitutes an *i* for the strong *a*, as in *igni* = S. *agni*, Lith. *ugni*, in *lingua* compared with Fr. *langue* and L. *lambo*, in the so called negative prefix *in* for *av*, and *in* of *in-tumescere* 'swell up,' = *av* of *ava*. Then for the loss of *s* or aspirate cf. *anus* for *sonus* 'an old woman' (see p. 376), corresponding to *sen-ec-*.

It has been just now assumed that *re* (*red*) is a decapitated word from *er-e* or *er-ed*; and this is an affection from which many prepositions have suffered, as: 1. *av* 'up,' whence *av-a*, and this reduced to *na* 'up' in Russian; 2. *ev*, in L. *in*, *inde* (as in *inde ab initio* 'down from the beginning,' and *sub-inde*, lit. 'up and down' in the sense of 'on and off' or 'ever and anon'), and then a decapitated *de* 'down' or 'in,' while from *ev-i* comes *ni* of the same double power in Sanskrit; 3. *ob* (pronounced *op*) 'after,' whence through a theoretic *op-os*, *pos** 'after'; 4. *sub super per*; 5. a theoretic *ad-u* or *az-u* seems to supply the wanting link between L. *ad*, Go. and E. *at*, O. G. *az* and Go. *du*, E. *to*, O. G. *zu*; which is confirmed by the Gael. *adh*, cut down at times to *a* before a consonant, with a decapitated *do* 'to'; 6. similarly a theoretic *agu* or *agus* would serve to connect the Gael. *ag* 'at' and *gu* or *gus* 'to'; 7. L. *am*, O. N. and G. *um*, Welsh *am*, Erse *im*, Lith. *ap* 'round,' lead to a disyllabic *αμφι*, Erse *imme* or *imu*, Lith. *api* or *apẽ*, and then to a decapitated Gael. *mu*, as though a trilliteral *umu* had once existed; 8. G. *auf*, *über*, *ver*, and E. *up*, *over*, *for*, in *forget* = G. *vergess-en*; 9. lastly, L. *ab*, Go. *af*, E. *off*, *of*, seem to have once had derivatives such as *απο*, Go. *afan* (*afana*), and thence some decapitated form, = G. *von*, D. *van*, and E. *on*, as used in the vulgar phrase *six on 'em*.

A few more words are needed as regards *per*. I have stated that it is cut down from a disyllabic *sup-er*, and so derived

* Let me here correct what I have written in the Essays, p. 123; for I agree with Bergk (Beitr. 119) that we should read: Nèque patrem (c)umquám postilla uidi. Quid uos tûm patri . . .

from *sub* 'up.' But the meanings seem to differ. This however is an error of our lexicons, which omit the primary notion 'over,' as the following passages will show:—1. *pér mare ut uectú's, nunc oculi térram mirantúr tui*, Pl. Merc. 2, 3, 37; 2. *quémdam municipém meum dé tuo uolo pónte 'Ire praecipitem ín lutum pér caputque pedésque*, 'over head and heels,' Catul. 17, 9; 3. *hostes se per munitiones deicere intenderunt*, Caes. b. g. 3, 26, 5; 4. *per eorum corpora reliquos transire conantes reppulerunt*, 2, 10, 3; 5. *is transmisso per uiam tigillo uelut sub iugum misit iuuenem*, Liv. 1, 26, 13; 6. *per uallum per fossas perruperunt*, 10, 19, 21; 7. *per stragem iacentium elephantorum atrox edita caedes* (where Madvig wrongly sanctions a conjectural *super*), 26, 6, 2; 8. *equus pilo traiectus quum prolapsus per caput regem effudisset*, 27, 32, 35; 9. *ponte per Nilum facto*, 44, 19, 9; 10. *ut ducat Iapyx Per medias Histri (frozen) planstra bubuleus aquas*, Ov. Pont. 4, 7, 9; 11. *dein uicinales uias agrestesque per ipsas formas (pipes of an aqueduct) derigunt*, Frontin. aq. 126; 12. *deinde per caput prius calida (aqua), tum egelida perfundi*, Cels. 6, 6, 8, p. 229, 17 ~~Det.~~; 13. *perque uolabit equos*, *Dar.* ludet *per terga uolantum*, Manil. 5, 87; 14. *aquarum per gradus cum fragore labentium*, Sen. ep. 86, 7; 15. *naues suas umeris per iuga montium . . . transtulerunt*, Just. 32, 3, 14; 16. *misso per murum corpore (Quieti) Odenato se dediderunt*, Treb. Poll. Gall. 3, 2; 17. *per proximi fluminis marginem praecipitem sese dedit*, Apul. 5, 25. Add to these *per-uorto* 'overturn,' *per-cello* 'knock over,' *per-lino* and *per-ungo* 'smear all over,' *per-fundo* 'drench,' *per-nideo* 'overlook' (in Hor.) = *über-sehen* and *ver-sehen*. All this again is confirmed by the Lithuanian prep. *pér* = *durch, über* (for so Nesselmann, reversing the right order), as: *pér kalnà* 'über den Berg'; *pér tiltà wazotì* 'über die Brücke fahren,' *pér szimtà zingsniù*, 'über mehr als hundert Schritte'; and then in the Erse says Ebel (p. 628): *For significatione convenit fere cum praep. germ. über, lat. super.*

It may perhaps be as well to point out that a root or monosyllabic preposition has often a double form, with a weak and with a strong vowel, while the secondary or comparative forms at times follow suit. Thus by the side of *ex* and *L. in* our own

tongue has alike *in* and *on*; and from the latter are deduced *under*, G. *unter*, agreeing with the Umbrian *hondra* 'below' (s. pp. 44, 45), and *huntro* 'younger.'* Then again the Gr. *νεω* and L. *nuo*, perhaps *νεφος*, L. *nouos* and E. *new*, more certainly the Lith. *nũg* and *nu* 'down' seem to point to a preceding *on*, and the same form is supported by *νχ* and *noc* of *νχα νξ nox* (sun-down), as also by the vb. *κ(ο)ν-ωσσω* 'nod' and *nod* itself; while the L. verbs *con-quin-isco oc-quin-isco*, as I before stated, have probably changed *con* into *quin* before the weak vowel of the suffix *isc*. On the other hand from the other form with a weak vowel, *ev* or *in* come *evi*, the S. *nĩ* 'in' or 'down,' Osset. *ny*, Russ. *niz*, Dan. *ned*, etc.

Again the G. prefix *er* 'up' has for its Gothic analogue *us* or *ur*, nay in O. G. is also represented by *ur* and *ar*; and so is probably one with the prefix *ur* denoting origin as in *Ur-bild*, *Ur-sache*, etc.; and if so, one also with the stem of the L. *orior*. Thus I would connect with this root the G. *ruck* 'a jolt or upward movement.' On the other hand from the weak-vowelled *er* come *rück* 'back,' A. S. sb. *hricg*, E. *ridge* and *rick*, Sc. *rig*, as well as L. *re*.

So too from such a form as L. *am* 'round,' G. *um*, Dutch *om*, flows the Gaelic *mu*; but from Erse *im*, an Erse *imme*.

While the Latin language deduces a comparativel *pōs* (or rather *op-os*) 'after' from *ob* 'after,' the Gr. prefers weak vowels in *επι* for *επι-ς*. But here we have again an interchange of strong and weak vowels in the kindred *οπαζω* etc. compared with *ἐπι-ομαι*.

Lastly to a simple *av* 'up,' whence the ordinary *av-a*, corresponds at times a L. *in* 'up,' as seen in *in-cipio* 'take up,' *in-tumescio* 'swell up,' whence a secondary *inter* as *inter-iungo* 'un-yoke' = G. *ent-joch-en*.

For the original and secondary powers of the Gr. *av* 'up' and its G. analogue *ent*, I must refer to the first of the 'Essays,' as many details are needed to support my views.

* Compare *neos*, itself an offspring of *ev*, uniting the meaning of 'young' with that of 'lowness' in the superlative *νεατος*; and on the other hand G. *alt* and our *old* with L. *altus*.

I will next give a brief summary of the chief cases, where independent prepositions fall into an identity of form.

Para as an ordinary preposition is one with L. *prae*, and so often found in the composition of verbs, as *παρ-ειμι* (comp. L. *prae-sens*); but it is at times of a totally different origin, one in fact with the L. *per* 'over' and G. *ver* = *über*; and so probably cut down from a lost *ἵpara*, as first in verbs: *παρ-βαίνω* 'transgress' (and this by the side of another *παρ-βαίνω* 'pass by'), *παρ-πηδάω* 'leap over,' *παρ-φῆμι* and *παρειπον* 'talk over' (cf. G. *über-reden*, and Lith. *per-kalb-* of like power from the vb. *kalb-* 'talk'), *παρ-πειθω* 'persuade'; and above all, *παρ-βλέπω*, *παρ-οράω* = L. *peruideo* (cf. Hor.), O. G. *über-schen* and *ver-schen*, A. S. *for-seon*, E. *over-look*, to which add our sb. *oversight*. *Παρ-ομνυμι* L. S. justly compare with G. *ver-schwören*, E. *for-swear*; and then the adj. *παρανομος* also corresponds to L. *perinurus*, *perfidus*. I will close the list with a few words where the physical idea of 'over' shows itself, as *παρ-αλείφω* 'smear all over' = *per-ungo*; *παρ-πεταλος* 'covered with plates,' *παρ-κομος* 'covered with hair,' *παρ-ωπιον* 'a blinker,' *παρ-ωτιον* 'a covering for the ear,' in all of which the notion *over* is clearly seen.

From the ordinary use of *in* in L. words with the sense of *in* 'on or down,' as in *ineo*, *impono*, *inclino*, together with *imus*, *incuruos*, we must separate a small class of words where *in* really represents the Gr. *av* (*ava*), and this, so as to unite the various meanings of the Gr. prep.: 1. *up*, as *in-stituo* 'set up,' *in-horresco* 'bristle up,' besides the just-quoted *incipio* and *intumesco*; 2. *back*, as *in-hibeo* 'hold up' or 'back' = *av-εχω*, *in-fringo* 'refract'; 3. *again*, as *in-stauro* 'celebrate anew' (= *re-stauro*), *in-gemino* 'redouble'; 4. *reversal*, *in-concilio* 'unfelt' so to say (wool that has been felted); *ignosco* 'forget,' or as we might say 'un-know'; *insimulo* (as opposed to *simulo* 'make like, pretend') 'strip of false pretences,' 'expose' (a pretender), and so 'accuse'; 5. *commencement*, as *in-formo* 'give a first rough shape to,' *im-buo* (= *ava-δευω*) 'wet for the first time,' *im-minuo* 'impair what was previously entire'; *im-pello* 'give a first effective shove,' 'start' (what was difficult to move); 6. *removal*, *in-fringo* 'break off,' *in-tabesco* 'melt away.' The French also has a prefix *en* of like origin and

power, in *enlever emmener emporter*, totally different from the *en* of *envahir, ensevelir, envelopper*. The G. prefix *ent* represents the Gr. *ava*, the *t* being excrescent; and the varied use of *ent* corresponds with this use of the second L. *in*. To this *ent* corresponds a Lith. *ant*; and here again *ant* gives place to *int* in the Memel dialect. (S. Nesselmann.)

But there exists yet a third prefix of the same form, viz. the *in* often prefixed to adjectives and participles, and somewhat incorrectly called a negative particle; incorrectly I say, because, although such is its ordinary use, the earlier meaning of the particle was 'male.' Thus Priscian (1, 9, 25, Keil's ed.): 'informis' dicitur mulier, non quae caret forma, sed quae male est formata. *Invidus* again means, not 'blind,' but 'one who has the evil eye,' *ignominia* 'a bad name,' *impotens* 'one who makes a bad use of power,' 'furious.' Another test of the power of the prefix is to be seen in the idea of intensity, which it conveys when attached to a word of evil power, as in the Welsh, *athrw* 'very heavy' from *trw* 'heavy,' *athrist* 'very sad' from *trist* 'sad,' *amghwaethach* 'much worse' from *gwaethach* 'worse,' *achas* 'very hateful' from *cas* 'hateful'; to say nothing of *an-hap* 'mishap' from *hap* 'luck,' *anlliw* 'stain' from *lliw* 'colour.' But I have dealt with this question at length in the 'Essays,' from which I will only take one additional illustration. The G. *llntiefe* unites the two opposite ideas of 'shallowness' and 'excessive depth'; and this with reason, for to the landsman great depth is often a serious evil, as involving the chance of drowning, whereas the sailor sees his greatest danger in shoal water. The word *male* moreover carries with it the same double power. While *male sanus* = *insanus*, we have intensity in *male tristis*, like the W. *athrist*, *male grauis* like the W. *athrw*.

As the prep. *in* appears in Latin generally as the analogue of *ev*, sometimes as that of *av*, so the ambiguity has passed into the derived forms *inter* and *intra*, identical in form, but wholly different in power as in origin. The more familiar *inter* signifies at one time 'among or between,' a notion not far removed from 'in,' at times 'under,' *aqua inter cutem* or *aqua intercus* 'dropsy,' *interula* (sc. uestis) 'under-clothing'; and the latter use goes

well with the original meaning 'down,' and indeed is shared by our own *under* and the German *unter* of like power. But the Latin has a second *inter* from *in* = *av* 'up,' and again like the simple pronoun with most of the varied meanings of *av*, as : 1. 'up,' *intelligo* 'pick or gather up' (information); 2. 'again,' *interpolus* '(cloth) fulled anew,' with a vb. *interpolo* 'vamp up anew'; 3. reversal, *interiungo* 'unyoke'; 4. removal, *inter cludo* 'shut off,' *inter-rumpo* 'break off,' *inter-ficio* 'make away with,' *inter-imo* 'take off' (as by poison), *inter-mitto* 'leave off,' *inter-aresco* 'dry up,' *inter-bibo* 'drink up or off,' *inter-minor* 'warn off with threats,' *inter-dico* 'warn off with words, forbid'; 5. 'through' (cf. *avaπειρω*, *avaπηγνυμι*) *inter-fodio* 'dig through,' *interdatus* 'distributed' (cf. *ava-διδωμι*).

The last examples are taken from Lucretius; and I am glad to see that my explanation of the compounds seems to have been accepted by the late Professor of Latin at Cambridge in his edition of the author. All this is confirmed by what is seen in German, A.-Saxon, English, and even French, for in all these languages we find the same intermixture of the two prepositions. Happily in German there are the means of drawing a distinct line between them. When *unter* in verbs is inseparable, then and then only have we the representative of the L. *inter* from *ava*; and it may be useful for some to explain what is meant by inseparable. The G. *unter-gehen* has the separable *unter*, so that we may say *ich gehe unter* 'I go down, sink, perish,' and *unter-zu-gehen* 'to perish,' in both of which the *unter* and *gehen* part company; but *unter-sagen* 'to forbid' (cf. L. *inter-dico*, and our *interdict*) has the inseparable *unter*, and so the corresponding phrases are *ich untersage* 'I forbid,' *zu untersagen* 'to forbid.' But the two classes are again distinguished by accent, those with the inseparable prefix throwing it on the root syllable of the verb, *unter-ságen*, the other class on the prefix itself, *únter-gehen*. To show that the meanings of *ava* are again found in the G. verbs compounded with the inseparable *unter*, I need only quote *unter-wählen* 'to grub up,' *unter-stützen* 'to prop up,' *unter-halten* 'to sustain,' *unterlassen* 'leave off,' and the above-mentioned *untersagen*. Again in the A.-Saxon, as the prefix *on* corresponds to G. *ent*, so *under* to the G. insep. *unter*; and thus

there is all but an identity of power in the A.-S. *on-gitan* and *under-gitan* 'understand,' *on-gynnan* and *under-gynnan* 'to begin,' *on-secan* and *under-secan* 'to inquire,' *on-wendan* and *under-wendan* 'to overthrow,' *on-cerran* and *under-cerran* 'to overturn.' But our own language has examples of the same preposition in *undertake* and *understand*; as also in our *enter-tain* from the Fr. *entre-tenir*, which seems to imply that the Latin, like the Italian, at one time possessed a vb. *inter-tenere* 'to sustain,' 'hold or keep up.' At any rate in none of the verbs here quoted is there to be found a trace of the meaning 'between' or 'under,' that is 'lower.'

Another example of the confusion of prepositions in Latin is seen between the ordinary *ad* 'to' and the *ad* of *adimo* for *an-imo* 'take up and away,' like *av-αιρεω*. Some see the ordinary prep. *ad* in *admoneo* 'remind' and *adgnosco* 'recognize'; but the more genuine forms are *ammoneo* (= *ava-μυνησκω*) and *agnosco* (= *ava-γνωσκω*), and the meaning evidently claims some representative of *av*, as also does *ascendo* 'climb up,' opposed to *descendo* 'climb down.' But again I refer to the 'Essays.'

Another example of confusion I take from the Teutonic family in the use of *to* = G. *zer* and *to* = G. *zu*, as:

Fris. *to-delva* 'dig up' (earth) and *to-delva* 'dig to pieces.'

A.-Sax. *to-dælan* 'adtribuere,' *to-dælan* 'disiungere.'

to-weorpan 'adicere,' *to-weorpan* 'disicere.'

to-clewan 'cleave to,' *to-clewan* 'cleave in two.'

Lastly I take an example from our own language, *un* as prefixed to verbs, as *undo*, *untie*, *unloose*, where *un* corresponds to the Gr. *av*, as *av-ελισσω* 'unroll,' *ava-σφραγιζω* 'unseal,' *ava-διδασκω* 'unteach,' and to W. *an*, as *an-hatru* 'uncover' from *hatru* 'cover,' *an-hualu* 'unfetter' from *hualu* 'fetter,' *an-hulio* 'develop' from *hulio* 'spread over'; and on the other hand the negative *un* attached to participles and adjectives, as *unseen*, *untaught*, *unwilling*, *unwise*, *untrue*. (See Essays, p. 27.) The Welsh shares the confusion, for here also the negative *an* reappears, and limited in the same way, as *llosg-ed-ig* 'burned,' *an-lossgedig* 'unignited,' *llud-cd-ig* 'fatigued,' *an-luddedig* 'not fatigued,' *hy* 'bold,' *an-hy* 'bashful,' *hybwyll* 'discreet,' *an-hybwyll* 'imprudent.' The Latin

indeed had a similar confusion between the corresponding *in* and the ordinary prep. *in*, as seen in *re infecta*, and *infectus* from *inficio*, and in the ambiguous *inuocatus*.

Yet another subject remains. Prepositions, like verbs, substantives, and adjectives, may well form diminutives. Thus, *por* 'for' seems to have given birth to a secondary *por-oc-*, and *er* 'up' to a secondary *er-cc-*, whence in Latin the adj. *reci-proc-us* 'up and down,' 'backwards and forwards;' or, to translate it by a Scotch phrase of the same origin, 'rig and fur'; or again by an English, 'ridge and furrow.' *Rig* and *ridge* I have already claimed as akin to the L. *re*, and the L. *porca* (*por-oc-a*) must be one with our *furr-ov*, which has the very suffix of diminution that should correspond to a L. *oc*. (S. also Essays, p. 90.) The G. *ruck* 'a jolt' and *rück* 'back' stand for *er-uck* and *er-ück*. *Recupero* (*recipero*) again has the same prefix; for this verb, like *im-pero*, is a compound of *paro*, and means 'to get back.' The notion that it is akin to *capio* may be thrown aside together with the blunder that the *u* is a long vowel, for the word *recuperator* occurs twice in Plautus (*Rud.* 5, 1, 2, and *Bac.* 2, 3, 36), and in both lines calls for a pronunciation *réc'perātor*, thus proving that the vowel is short. There is some reason for believing that *procul* and *propē* (cf. *proximus*) may also be derivatives from our assumed *p(o)roc-*, but this is a doubtful matter. The G. *dur-ck* and E. *thor-ough* seem also to have a diminutival suffix, seeing that the old German had a simple preposition *dur* of like power.

I conclude this chapter with a short reference to the fact that the L. preposition *per* and the G. *ge* are employed to denote or assist in denoting the completed action of verbs. Thus *percussus* is often given as a perfect of *ferio*, and with reason, as *quat* of *quatio*, *quer* of *queror*, are at bottom one with *fer* of *ferio*. So *pertaesum est* is practically the perfect of *tacet*. Lastly *ge* of the G. *ge-gangen*, to take that as an instance of a common principle, is in all probability identical with the L. *con*, and so well suited for the office. Compare too the L. *conuallis*, and the G. *Gebirge*, *Geschwister*, for a somewhat similar use of the prefix with nouns. Our own old prefix *y* in *yclept* etc. is of course one with this G. *ge*; and this is at times written *i*, as in Chaucer *idrawe* (= *drawn*) to

the stake, v. 2644, *ifalle* (= *fallen*), v. 3460. Another variety is *a*, as in (vv. 2805, 9638):

And yet moreover in his armes twoo
The vital strength is lost and all agoo——
I wold that al his poeple were ago.

Thus in the phrase 'three years ago' we have still a perfect participle corresponding to our later form *gone*. Indeed 'three years agone' was also once in use.

CHAPTER XXIX.

ADVERBS.

THE term 'Adverb' seems in one sense ill-selected, as it is not exclusively attached to verbs, being found at times in connection with words of all classes: as to adjectives, 'all alone,' 'all unseen'; to numerals, 'almost thirty'; to prepositions 'far above him'; to adverbs, 'very cleverly.' But if the word adverb be unduly limited by its name, and a defence be put forward in its favour that its chief, its leading use is connected with verbs, then it may be contended on the other hand that the term 'adjective' is of too general a character, seeing that words of this class attach themselves for the most part to nouns; and accordingly the name 'adnoun' has been adopted by some.

But these are secondary matters. A more important question is whether adverbs really form a distinct part of speech; and I feel that the answer must be that they do not, and that the term is but a convenient cloak for ignorance, the so-called adverbs being borrowed from the other parts of speech, but often with so much of change that their origin is disguised.

Not unfrequently simple adjectives are employed to qualify other than nouns, and so to perform the office of the so-called adverbs. Thus Shakspeare wrote: "Old John of Gaunt is grievous sick" (*Rich. II.* 1, 4); "'tis noble spoken" (*A. and Cl.* 2, 2); "Use her honorable" (*Henry VI.* 3rd pt. 3, 2). The same construction is seen in the use of comparatives and superlatives, as when Beaumont and Fletcher wrote: "mine is easier (= more easily) known than cured;" or Milton: "in them is plainest taught and easiest learnt." And this construction has

survived in vulgar speech, as: "and those excessive dear" (Defoe); "he is a prodigious passionate gentleman" (Fielding); "he must be precious old" (Dickens). But if such language be now condemned by polite society, there still survive phrases where the use of the simple adjective is widely sanctioned, as 'broad awake,' 'wide awake,' 'buy cheap,' 'sell dear,' 'play fair,' 'strive hard,' 'speak loud or low'; and indeed in such phrases an adverbial form as *broadly* and so on would not even be tolerated.

Words in *ly* are adverbs in English if derived from adjectives, as *newly*, *neatly*, *fully*; but the same in German, as *neulich*, *niedlich*, *völlig*, are at once adjectives and adverbs. On the other hand words of this class when derived from substantives are with us almost exclusively adjectives, as *lovely*, *manly*, *godly*, yet here again the German uses them in both parts of speech, *lieblich*, *männlich*, *göttlich*. It is but rarely that we do the same, as in the case of *only*, as 'an only child,' and 'a child only seven years old.' The loss of the final guttural in this suffix, *ly* for *like*, already existed in the L. *ta-li*- 'like this,' *qua-li*- 'like what,' while we on the other hand still retained it for a time in our old forms *quchillk*, *thilk*, which eventually were cut down to *which*, *such*, the palatal *ch*, as usual in the south of our island, taking place of a *k*-sound. But to return to the confusion between adjectives and adverbs, the classical languages exhibit the same, especially in the use of neuter adjectives as adverbs, such as *facile*, *multum*, *facilius*; also in such combinations as *dulce ridentem*, *dulce loquentem*. Nay in poetical language even plural neuters occur, as *erebra ferit*. But it is not alone as neuters that adjectives are so employed, for even a masc. nominative plays this part in *lubens faxim*, *nocturnus obambulat*, *commisit pelago ratem primus*, *ut periculo primus* euaderet*.

Prepositions again are often employed as adverbs, examples of which it would be unnecessary to quote; and again alike prepositions and adverbs do duty as adjectives. Thus we say *the above discourse*, *in his then state of mind*, *the off horse*; and in the older language phrases now no longer passable were

* Liv. 21, 33, where the MSS. have *prius*, some editors *prior*, both contrary to the idiom of the language.

permitted, as ‘*warn’d by oft experience*’ of Milton.* This construction is favoured by the use of the definite article, as seen in two of these examples; and the same is common in Greek, as *οἱ τότε ἄνθρωποι*, etc. But the Latin language having no such pronoun was compelled so to limit this use of an adverb as to show by the connection of the words that the adverb is performing this new office. This may be done by prefixing some adjective which belonging to the same noun binds the adverb up with the rest of the phrase, as *omnes circa populi*; or it may be a genitive, as *heri semper lenitas* of Terence, corresponding to the phrase just given ‘in his then state of mind’; or thirdly a conjunction may serve to separate the prepositional adjective from what precedes, as: “*extrema contio et circa Fabium globus increpabant dictatorem*” (Liv. 8, 32, 13), where a Greek might have said: *καὶ ὁ περὶ Φαβιον ὄμιλος*.

But the main difficulty with so-called adverbs is to analyse them; and here I must of course be brief. We do not call *iure*, *iniuria*, *ratione*, adverbs, but they serve as such, the mere ablative here denoting the manner. The word *temere* happens to stand by itself, and hence has the convenient letters *adv.* attached to it, so as to stop further enquiry. We may however safely say that it is an abl. of a lost neuter noun *temus temeris*† corresponding to the S. *tamas* ‘darkness,’ which is also a neuter, and has the very suffix which corresponds to *es (us)* of L. neuters, as S. *apas* = L. *opus*; and thus we get at once a meaning that accords with the idea of ‘blindly’ ‘rashly,’ *i.e.* ‘the doing a thing *in the dark*.’ Nor is the word an isolated form in the L. vocabulary, for the verb *temerare* ‘to defile’ may well come from it, just as *uolnerare* from *uolnus*, *onerare* from *onus*; and as white among colours is the ordinary symbol of purity, so black of impurity; and thus we have here a metaphorical use, akin to our own phrases ‘to blacken a man’s character,’ or conversely ‘to whitewash him.’ The sb. *tenebrae* also (for *tem-ebrae*) is of the same stock, and bears but an accidental likeness to the verb *teneo*. This derivation of *temere* also accounts for the difficulty which prosodians

* Most of the English examples here given are taken from the Grammar of Fiedler and Sachs. † Cf. Trans. Ph. Soc. for 1866, p. 25.

have found in getting authority for the quantity of the last syllable; for now that we know the final *e* to be short, we see a reason why it should not obtain admission into the ordinary metres except with elision. Lastly the adj. *temerarius*, in agreement with *uolnerarius* from *uolnus*, points to a n. *temus* as its parent.

But more commonly an adjective accompanies the ablative in the formation of so-called adverbs. Here it is a rare matter to find cases so free of all obscurity as our *other-wise*, where the second element is all but identical with the G. *weise*, and indeed in the older forms of our language was often written as a separate word, 'in this wise' etc. An example equally clear is seen in the Ital. *divotamente pietosamente*, where the original meaning of *mente* is preserved, but not so in *interamente* 'entirely,' *massimamente* 'chiefly.' It will be observed that the feminine adj. is exclusively used in this formation, alike in Italian and its allied languages, as in Fr. *doucement mollement*, for in *hardiment sensément* the loss of the final *e* is due solely to the meeting of two vowels. The Fr. *comment* 'how' is not very violently altered from *qua mente*. In the L. *simitu* little has vanished except the *c*, and that in a position before a *t*, so generally fatal to it; and *sim-ictu* may be literally translated, as was said above (p. 61), 'at one blow,' with the same metaphorical meaning which is seen in the Fr. '*d'un seul coup*' and the G. '*mit einem Schlage*.' The L. *quo-modo* explains itself, for the altered quantity of the final *o* (as in *Maccenas quōmōdō tecūm*) is the natural result of its new treatment as an adverb. Indeed *modo* itself has suffered the same indignity, for in origin it must have been an abl. of *modus*; and we can see how it obtained the peculiar limitation of meaning, as 'only,' at least when in combination with numbers, say *trecenti modo Fabii*, for it adds force to such a phrase, when we are able to say that we are speaking not vaguely but by measure; and the same argument applies to *admodum trecenti* 'full 300.' Thus we are saved from that strange etymology which would make *modo* = *μοι dos*, where I suppose *dos μοι* must have been meant; though this would be fatal to the likeness. But to return, seeing that *modo* itself as an adverb was shortened

to a monosyllable by the Romans themselves (p. 131), it was to be expected that *quomodo* would meet with similar treatment; and thus we are brought in the derived languages to *como come* and *comme*.

So far the noun has been expressed; but this also often vanishes, as readily implied, much for example as with *dextra* and *sinistra manus* is understood. In this way we may account for the pronominal adverbs *ea, qua, hac, illa*, etc., referring to a *via* understood, and so denoting the road 'along which.' So *eādem* also has often in the same way the sense 'along the same road'; but there is another use of this word with *opera* expressed or understood. In the fuller form we have it in: *Eadem ego opera hacc intus tibi narrauero*, Pl. Most. 4, 3, 45; add Bac. 1, 1, 60, Capt. 2, 3, 90, Asin. 3, 3, 52. On the other hand *eadem* alone in this sense occurs at least ten times in Plautus, as Glor. 2, 3, 32; Bac. 1, 1, 15; 3, 4, 23; Poen. 3, 3, 3; 3, 4, 9; etc.; and in Ter. Hant. 2, 3, 147. The same double use of *una*, with and without *opera*, is of frequent occurrence; as four times in Plautus with *opera*, as: Men. 3, 2, 2; Most. 1, 3, 102; Cas. 2, 5, 1; Ps. 1, 2, 86; while the use of *una* alone for *una opera* runs through the whole language; and hence I ventured to bring the line in the Hecyra into good metrical order by the simple omission of the superfluous *opera* (p. 268). *Ho-die* need not be deduced from *hoc-die*, for the *c* is no essential part of the word, and thus all is clear; but we see corruption at work in the Ital. *oggi*, and still more rapidly so in the Fr. *hui*, where the origin is so concealed that it was found necessary to prefix *au-jour-d'*, so that the full word is made up of six elements, while our own *to-day* is identical with the Latin. With *hodie* may be classed the O. Sp. *ag-ora* (*hac hora*), now *ahora* and Prov. *aora* (Diez Gr. 2, 391); from which form I suspect that the It. *ora* and Fr. *or* 'now' have undergone the loss of the all-essential *a* 'this,' which here performs the same office as in S. *a-dya* 'to-day,' Oss. *a-bon* 'to-day,' Else *a-nochd* 'to-night.' Similarly there seems reason for suspecting that *αὔριον* 'to-morrow' has likewise lost a prefixed article, for there can be little doubt that *αυρ* of this particle is one with the stem of the Aeol. *av-ωs* for *αυσ-ωs*, some such noun as *αυσω* giving also origin to the

L. *Auro-ra* ; for with the addition of the definite article, and then only, have we a fitting pendant to our own *to-morrow*. But in such words, from their very love of brevity, the ultimate loss of the article was to be expected. Thus the Ital. *dimano*, Fr. *demain*, have a preposition but no article ; and the L. *heri* means strictly 'in the evening' (I did it), *i. e.* yesterday ; and it seems probable that as the first syllable of *αὔριον* speaks of the 'dawn' or 'sunrise,' so *hes* of *heri hesternus* (= $\chi\theta\epsilon\sigma-$) is one with the initial syllable of *ἑσπερος*, L. *uesper*, and of our own *Wes-t*, in which the *t* may well be excrescent as in our *yest-er-day*, *yestreen* (*yester-even?*), G. *gestern*. Again in the Swiss dialect (Frauenfeld Sw. Mundart, 1838) *nächt* by itself is used in the sense of 'letze Nacht'; and so too in Lith. *wákaras* 'evening' is all but one with *wákar* 'yesterday.'

Actutum is commonly called an adverb ; but Dr. Ebel in Kuhn's Zeitschrift (4, 320) gives an acceptable etymon for it, as derived from *oc* of *oculus* (cf. *ak* of Lith. *ak-is* 'eye') and *tu-eor*, so that perhaps *tutu-m* may be an old dat. of an old noun *tutu-* (for the suffix cf. *interim* = *interibi*). Thus the word would correspond in power to the G. *in einem Augenblicke* 'in the twinkling of an eye.' Nay our own *twinkle* may well be akin to *tueor*, for this verb had *tum*, not very different from *twín*, for its stem, as shown by *aeditum-us*,* the fuller and therefore the older form of *aedi-tu-us*.

One of the commonest formations of adverbs so-called lies in the union of a preposition and a noun, as the L. *ilico* (*in loco*) 'on the spot,' a phrase identical in form as well as power with the Fr. 'sur-le-champ,' G. 'auf-der-Stelle'; *exemplo*, the same, but borrowed no doubt from the language of the augurs (v. Serv. ad Aen. 1, 92), when they gave their report at once 'from the consecrated ground' without consulting their books. Add *in-uicem*, *in-dies*, *pro-fecto*, in which the *o* of the prep. dropped its quantity, partly because of the new office of the word, partly because the long penult tends to shorten the antepenult; and so on. Then we have E. *aboard*, *afoot*, *anew*, etc., *off-hand* (= $\epsilon\kappa\ \chi\epsilon\iota\pi\omicron\varsigma$), *instead*; Fr. *aval* (*ad uallem*), *amont* (*ad montem*), corresponding with all

* So Varro derives an old noun *cortumio* from *tueor*, thus again encouraging the doctrine that the stem was *tum*.

accuracy to the Swiss phrases of like power, *z'Thal* 'hinab,' *z'Berg* 'hinauf' (Frauenfeld).

The union of prepositions and pronouns is especially common, as *L. ad-eo* and *quo-ad*, where *eo* and *quo* are accusatives no doubt, standing for *com* and *quom* just as *caelo* and *Oreo* stand for *caelum* and *Orcum* in *Aen.* 5, 451, 2, 398, *scribo* for *scribom*, *τυπτω* for *τυπτομ*. Add *per-inde* for *por-inde*, and so = *pro eo*. In *Ital. allora* (= *ad illam horam*) we have both pronoun and noun; but these are matters in which little discussion is called for. Scarcely so *post-eā*, *ant-eā*, *inter-eā*, *antehāc*, *posthāc*, *postillā*, etc., where some see a neuter plural, failing to observe the quantity of the vowel, while others think they find a fem. abl. But the forms of *antequam*, *postquam*, *praeterquam*, etc., seem clearly to show that an *m* has been lost in the first set. At the same time it may be left an open question whether the suffix implied in this *m* be an accusative, as might first be thought, or a dative. For the latter we have the parallel case just quoted of *interim* for *inter-ibi*, and the use of an undisputed dat. in the *G. nach-dem*; and certainly a dative on the general principles of language is better suited for such prepositions, when no motion is implied, than an accusative. Indeed I cannot hide from myself a suspicion that in Latin the practice of attaching accusatives to prepositions of rest, and so excluding altogether the use of these particles with a dative in opposition to the Greek habit, may have grown out of truncated datives in *m* being mistaken for accusatives, and so introducing a general error. Be this as it may, the loss of a final *m*, as seen just now in many Latin words, is surely not to be doubted in *mea* (*tua* etc.) *rēfert* for *meam rem fert*, for the *a* in these pronouns is no neut. pl., as at once appears from

Illūc confugies: Quid meā? num mihi datumst?

—Ter. Haut. 4, 5, 45.

Etiām dotatis sóleo. Quid id nostrá? Nihil.

—Ter. Ph. 5, 8, 47.

In the construction *meā rēfert* I find a fem. noun for the pronoun in *rē* for *rem*, corresponding to *meā* for *meam*; and the same in *mea interest*, holding this to represent *meam inter rem est*. The

use of an ordinary genitive in such phrases as *Ciceronis refert*, *Ciceronis interest*, admits of a precisely similar explanation, and so tends to justify the theory.

The union of preposition with preposition is seen already in the later Latin language, but is far more common in the Romanic languages, as *avanti*, *avant* = *ab ante*; *dopo*, *depuis* = *de-pos* (not *de-post*); while a triple combination exists in *d'av-anti* and *devant*. So also, says Diez (2, 404), in the Sp. *par-a-gon* (= *per-ad-con*). Nay in *d'or-en-av-ant* 'from now in advance,' we have four prepositions embracing a single noun.

But the most frequent formation of adverbs occurs in the treatment of cases of pronouns as such, as first genitival forms with the notion 'whence,' 'from,' *ενθ-εν*, *τοθ-εν*, *ὀθ-εν*, *ποθ-εν*, *ὀποθ-εν*, L. *ind-e*, *hin-c*, *illin-c*, *istin-c* (these three contracted from lost forms *hind-e*, *illind-e*, *istind-e*, with *d* excrecent and suffix *ce* added), *und-e*; O. N. *hèð-an*, *þeð-an*, *hveð-an*; A.-S. *leon-on*, *þan-on*, *lucan-on*, also written with a final *an*; O. F. *heun-en*, *heth-en*, *heun-es*, now *hence*, with similar varieties of *thence* and *whence*; G. *hinn-en*, *dann-en*, *wann-en*, forms nowadays strengthened by a prefixed *von*. But this suffix is not limited to pronouns, as witness *εμεθ-εν*, *σεθ-εν*, etc., *ουπανοθ-εν*; L. *int-us*,* *fundit-us*, *divinit-us*; O. N. *heim-an* 'from home,' *inn-an* 'from within,' 'out'; *ut-an* 'from without,' 'in'; *neð-an* 'from beneath,' 'up'; A. S. *norð-an*, *west-an*.

Secondly datival forms of the place 'where,' 'at,' *τοθ-ι*, *ὀθ-ι*, *ποθ-ι*, with *αυτοθ-ι*, *οικοθ-ι*; † L. *ibi*, *ubi*, *ali-bi*, *utrobi*, ‡ *hi-c*, *isti-c*,

* *Intus* had this power alone at the outset, as in Pl. Glor. 2, 5, 49: 'Ecfer mihi maceram intus.' Add Most. 3, 1, 45; Ps. 2, 2, 10; 4, 7, 19; Bac. 1, 1, 62; 4, 6, 26; 4, 9, 127.

† It would seem that these adverbs passed through shortened forms to a final *ov*, as *ποθι ποθε ποε που, αυτοθι . . . αυτου*. 'Οθι was perhaps saved from this by rivalry of the negative *ov*; otherwise we should have had an identity of form with the Fr. *ou*, the representative of *ubi*. That we have a dat. rather than a gen. in *αυτου* seems established by the phrases which L. S. quote: *αυτου ενι τροιη, αυτου τωδε ενι χωρω, αυτου ταυτη*. I say this with the more confidence, because even so-called adverbs of pronouns agree in case with the adjoining noun, as: *ibidem in luto*, Ter.; *in angulum aliquo*, Ter.; *indidem ex Ameriu*, Cic.

‡ But the form *utrobidem* of our Lexicons is a simple monster, such

illi-c ; O. N. *upp-i*, *niçr-i*, *inn-i*, *ut-i*, *framm-i*, all denoting at a place, while the corresponding Swed. Dan. and A.-S. substitute, *e* for *i*, and even this is altogether lost for the A.-S. *hær*, *þær*, *hwær*, and for the ear in our *here*, *there*, *where*.

Thirdly accusativ forms of 'whither,' 'to,' ποσε, ὅποσε κεεισε, seem to have first occupied the ground in Greek ; but these losing their sigma between vowels, were readily contracted into the ordinary form ποι ὅποι; and similarly οἱ 'whither,' implies a lost ὅσε. But the forms ποσε, etc., seem to have lost at the close ; and when I call to mind that a theoretic καν supplies the best explanation of the several allied particles κεν κᾶ αν and κε (Essay^ξ, p. 161), I think it not impossible that ποσαν, i. e. an accusativ form, led to ποσε. The Greek ὥδε carries with it the two different meanings 'thus' and 'hither.' Perhaps the two were at first slightly distinguished in form, for ὥδε 'thus' may have had originally an iota subscript, so as to correspond with τῷ 'thus,' while ὥδε 'hither,' would be in good keeping with the Latin series of adverbs denoting 'to a place,' as *eo quo ho isto illo*. But the third of these, *ho* 'hither,' is not itself found except in composition, as in the ordinary adverb *hoc* or *huc*, to which may be added *horsum* contracted from *ho-uorsum*, and *huc-usque* from *ho-cusque*, for such, as I have already said, is the just division of the adverb. But these Latin adverbs have no doubt lost a final *m*, as just stated. The Go. *hidré* (Mark 11, 3 ; Luke 14, 21), *jáindré* (Luke 17, 37), *hvadré* (John 7, 35), representing respectively 'huc,' 'illuc,' and 'quo,' and O. N. *heðra* 'huc,' *þaðra* 'eo,' have much in common with A.-S. *hider*, *þider*, *hvider*, E. *hither*, *thither*, *whither* ; but are not easy of explanation. That the *n* of the

a word as *uter-dem* being an impossibility. It is not an ἀπαξ λεγόμενον, as sometimes marked, but rests solely on a bad conjecture in Pl. Truc. 1, 2, 50, where the MSS. B C D give : 'Vtrosque percognoui *ttrobeidem*. Istoc pol tu otiosus.' The letters in italics stand probably for *probeit-m*, i. e. a dittograph for *probe* and *pridem* ; and I would read : 'Virósque percognóui pridem. Istóc pol tu otíósus.' It has been opposed to this that a double compound *per-cognoui* is against the usage of Plautus, but this is an error, for he has *abscondo*, *recondo*, *absumo*, *deperco*, *disperco*, *disperdo*, *expergiscor*, and even *dispercutio*.

stem should pass into the other dentals *nd* or *d* or *th* is only what one might expect; but whence the *r*? Perhaps this *r* is a reasonable substitute for the original *n*, as in the Fr. *ordre*, *pampré*, *diacre*, in which case the A.-S. *hider* might represent an accusative *hid-an*; but the final vowel of the Gothic and Norse would still be left as a stumbling block. Our own language again, as well as A.-Saxon, Old Saxon, and Norse, use shorter forms, such as *here*, *there*, *where*, with the idea of 'motion to.' This however is a difficulty of easy solution, for a *th* between vowels in English is apt to vanish, as in *or*, *gaffer*, *gammer*, Sc. *smure* = *smother* (s. Essays, p. 181); and to these may be added the interr. *wher* for *whether* in Chaucer, as in v. 9407:

"Wher sche be wys or sobre or dronkelewe."

The adverbs of time 'when' fell under view in the note p. 334, where it was contended that the fuller forms had a datival suffix attached to the stem. To the examples there given may be added the A.-S. *ƿænn-e* or *ƿonn-e*, *hwænn-e* or *hwonn-e*; and the disyllabic form was still available for Chaucer, as:

"And thanne schaltow nought repente the" (v. 9360).

But the Gr. *τοτ-ε*, *ότ-ε*, *ποτ-ε*, may probably be regarded in the same light, and possibly even the L. *quand-o*, for the *d* may well be a mere outgrowth from the *n*; and indeed a Go. *ƿandē* or *ƿandei* with the sense of *quando* occurs in Luke 1, 34; 16, 3.

The L. *subinde* seems to admit of two explanations, both of which make it 'up and down,' which like our own combination 'off and on' is a suitable mode of expressing 'repetition.' Possibly the middle syllable *in* may be one with the conjunction *et*, which in my Essays (p. 166) I have doubtingly claimed as the analogue of our own *and*, G. *und*; but my argument would have been firmer had I then called to mind that as we often drop the *d* of *and*, so the Dutch give to the particle the very form *en*; nor is this use of the nasal limited to modern languages, for the Oscan has *in* or *ein* (Mommesen, 'Unterit. Dial.' p. 264; and 'Osc. Stud.' p. 43), while the Umbrian employs *ene* and like forms (A. K. 1, 136). The other explanation, which sees in *inde* an adverb 'down,' has been given in the Essays.

There are no doubt many adverbial forms which have not been yet successfully analysed. Among these the Latin forms in *im* as *turmat-im*, and the corresponding Gr. in *ov* or *a* as *αγεληδ-ov* or *-a*, occupy an important place in respect of number of examples. It will be observed that I have placed the hyphen, so as to separate the dental from the suffix; and I have done so on the principle which forms the leading subject of my eleventh Essay ‘On False Division of Suffixes.’ As I hold that L. nouns in *a*, Gr. in *η*, had originally a guttural suffix *ac* or *αγ* (Ch. 5), so I also believe that the guttural first gave birth to a dental, and then vanished leaving a long vowel in compensation. In the L. *im* I think I see what will explain the formation, viz., the case-ending of a pl. dat. *Imus* would have been more satisfactory, as representing *ib-us*. But the loss of the final letters has its parallel, and this in the same case, in O. G. *jiskam*, by the side of *pisc-ib-us*, Go. *sun-um* with Lith. *sun-um-us*. So too in the first person of verbs we saw the Gothic was satisfied with *am* in place of *am-es*; and this was admissible so soon as the first person sing. had lost its *m*. Similarly the G. *de-r-en* possesses a symbol *r* for the case, a symbol *en* for plurality; but the English are satisfied with *their*, and this because it happens that throughout the plural, and only in the plural, have we an initial *th*, whereas the G. carries its *d* through both numbers. If this be accepted, the L. and Gr. forms in question will agree with our own construction ‘by troops,’ ‘in herds’; and *paulatim* will agree with our ‘by little and little,’ It. ‘poco a poco,’ Fr. ‘peu à peu.’

In the case of the L. series *parumper*, *paulisper*, *tantisper*, *quantisper*, *semper*, *nuper*, the chief difficulty lies in the *per*; but though this syllable conceals from us its origin, we may be sure that it carries with it the idea of time; and thus there is a gain in placing the words together.

Our *once*, *twice*, *thrice*, may with the same advantage be compared with the Gr. ἀπαξ (for ἀπ-ακ-ις), τρις and τρι-ακ-ις,* τετρα-ακ-ις, etc., for here again we have all but an identity in the forms of the suffix; and the difference of quantity leads one to give a

* For this suffix *ακ* see p. 286.

preference to our own variety, as being the longer. Perhaps too we have the same suffix in the L. *quingu-ies* * or rather *-iens*, etc.; but if so, the Latin has the advantage in fullness of form. What the origin of this may have been remains unknown, but we may safely conclude that it lay in a substantive denoting something like 'time' or 'turn,' as in Horace's '*plus vice simplici*,' compared with the Fr. *fois*, as in '*mille fois*.'

The Gr. adverbs in *ως* and the L. adverbs in *e* I hold to have a common suffix. In the first place, as I have already stated in the Essays (p. 235), *οὕτως* readily drops its *σ* in *οὕτω*; and another example is *αφνω* *αφνω*. Then this last word substitutes an *η* for an *ω* in *αιφνης*. I quoted before the Plautian adverb *ineusceme* as the equivalent of *ανεσχημως*; and now add three consecutive examples in the Glor. 2, 2, 58: *Eúge eusceme* hercle ástitit et† *dúlice* et *comédice*. Thus we know that Plautus identified the two suffixes. I further pointed out that the Latin language was somewhat indifferent as to any preference between a long *e* and long *o*, as in *uere uero*, and I might have added others, as *certe certo*, *rare raro*. But the *s* also I suggested has its representative in *r* of such adverbs as *brevit-er*;‡ and if I can give reasons for the belief that the *er* of such adverbs had once a long vowel, the argument will be tolerably complete. Now in the 'Addenda' to the Essays I gave three examples in support of this view, which I here repeat:

'Vt lépide ut liberálitēr, ut honéstē atque hau granáte,' Pl. Rud. 2, 3, 65.

'Reór, peccatum lárgitēr. Immo háec east,' Epid. 3, 4, 49.

'Fácie honesta; mírum nī ego me túrpitēr hodie hīc dabo,' Ter. Eun. 2, 1, 24.

And to these now add:

'Sín alitēr animátus es, bene quód agas eueniát tibi,' Pl. Trin. 3, 2, 89.

* It has already (p. 232) been stated that the L. *sem-el*, *ter*, *quater*, probably superseded fuller forms, *semel-is*, *ter-is*, *quater-is*, and *bis* of course stands for *du-is*, so that here too we have a suffix identical with that of the Gr. adverbs.

† Ritschl *de suo* substitutes *sic* for *et*, most unhappily.

‡ For this division of the adverbs see Essays, p. 235.

Quoniam ^{mihi} ^{amico} *amicit̃er* hanc c̃ommoditatis c̃opiam,'
Pers. 2, 3, 5.

'Loca h̃aec circit̃er excidit mihi : mi h̃omines,' Cist. 4, 2, 8.*

'Seũerit̃er hodĩe sermonem am̃ica mecum c̃ontulit,' Titinn.
ap. Non. 510, 1.

In the Deutsche Gr. (3, 127) Grimm has a heading 'Genitivische Adverbia,' in which, as it appears to me, there is much which, if true, needs further explanation. I can fully understand the use of a genitive to denote the idea of the L. *de* in *de nocte*, *de die* 'in the course of,' *e. g.* in the Go. *gistra-dag-is* 'yesterday,' O. G. *tages inti nahtes* 'die noctuque'; in the G. *tags*, *morgens*, *abends*. So *needs* agrees with *ex necessitate* of Tacitus, *ἐξ αναγκης* of Sophocles. Something like a genitival suffix, as to form, shows itself in the Sc. *blind-lingis* or *-lins*, G. *blindlings*, Sc. *darklins*, but the power of this case-ending is not easy of apprehension, and would still leave the *ling* or *lin* unexplained. I may observe however that Grimm, after speaking of certain adverbs as of genitival origin in pp. 88, 89, of vol. iii., corrects himself in p. 590 by assigning them to the class of comparatives.

In the 24th chapter I spoke of *cedo* 'give me, tell me,' as really a pronominal adverb, representing a preceding *cen-o* meaning 'hither' 'this way;' with a plural *cette* of like power, simulating the form of a pl. imperative. What I there said would have been much strengthened, if I had adduced the strangely parallel case of the Gr. *δευπο δευτε*; the latter of which I now see that Buttmann holds to be contracted from *δευπ' ιτε*. Can *cette* stand for *cedo ite*? I think not.

In *cedo cette* then and *δευπο δευτε* we seem to have an adverb usurping the character of a verb. The converse is seen in the L. *scilicet*, which, as originally a verb (= *scire licet*), is followed by an inf. in Plautus, Lucretius, and Sallust; but already in Terence appears as an adverb.

In *duntaxat* also we have a verb which with the aid of a conjunction supplies what in effect is an adverb, for its form suggests a derivation from *dum taxat*, where the logical expla-

* Bacchiac metre. See Haupt., *Hermes*, 4, 33.

nation seems alone to present a difficulty. Our own word *tax* is probably derived from the L. vb. *taxare*, but gives but a poor clue to the real meaning of the original verb. Such a failure indeed is but little to be wondered at, considering the nature of the case, for when we derive a word from a Latin origin, we take it with its latest meaning, whereas it is in the oldest use of a L. word that we must expect to find that meaning which results from its formation.* Fortunately Gellius (2, 6, 5) gives us both the origin and the true meaning of the verb, when he writes: "*taxare* pressius crebriusque est quam *tangere*, unde procul dubio inclinatum est." If from *tangere tactus* we might rather have expected *tactare*, we must remember, that while the older dialect preferred *pultare*, *mertare*, these in later times were supplanted by *pulsare*, *mersare*. So from *affigere* came two participles, *affictus* and *affixus*. So explained *dumtaxat* or *dumtaxat* would signify 'until it touches.' This will be found satisfactorily to account for the different uses of the word, even though these uses differ so widely, as to include the very opposite ideas of 'at most' and 'at least.' The difference will be found to turn upon the question, whether it be a command that we are dealing with, or a permission. In a command, the qualification *dumtaxat* 'until it touches,' must mean, 'not less than,' 'at least,' leaving at the utmost only a permission to go further. But with a permission, the limit is in the other direction, 'not more than,' 'at most.' Examples will place this in a clearer view. In the Digests (50, 16, 202) we find: "*quum in testamento scriptum esset ut heres in funere dumtaxat aureos*

* This is an important matter for lexicographers. I will here point to a few instances in point. *Obtinere* and *occupare* look very like our own *obtain* and *occupy*; but the meanings widely differ, for a reversal of the two translations would give what is nearer the truth. In fact *ob-tinere* is 'to hold tight, as against (others)'; and *occupare* 'to seize in the presence (of a foe)'; and consequently with all despatch, so as to anticipate that foe, the preposition *ob*, like its analogue *επι*, meaning 'in the presence of' or 'before.' *Usurpare* again a beginner is tempted to translate by our E. *usurp*, which in the best age of Latin was I might say almost the reverse of the meaning. *Vsurpatio* from *rumpere* is duly defined in the Digests as *interruptio usus*, 'the stopping of an adverse user' by some act of ownership, etc., so as to assert a right. See Trans. Philolog. Soc. for 1855, p. 96.

centum consumeret, non licet minus consumere: si amplius uellet licet." In Orelli's inscription (1707) occurs another testamentary direction, where the translation 'at least' is required. I next take a case which has a permissive character. In the Digests (25, 1, 4, 10) a praetor issues an order: "ut mittant, si uelint, quae uentrem inspiciant, mittantur autem mulieres liberae duntaxat quinque." In a commission of so delicate a nature the law might well require that the jury of matrons should be limited. Take again a permissive case from Cato's 'de re rustica' (49): "Vineam ueterem, si in alium locum transferre uoles, duntaxat brachium crassum licebit," the plants to be so removed to fresh ground must not be thicker than one's arm. To these references I add the Corpus Inscr. 197, 12; 198, 34; 205, 2, 18.

The negative is perhaps the most important adverb in all languages. In the Latin and Teutonic families its simplest form seems to be *ne*; but this is very commonly strengthened by union with another word, the two particles being sometimes blended together, sometimes not merely kept apart, but divided from each other by a third intervening word. The L. *non* for example is a compound of *ne unum*, and indeed *neu* still survived for the old language. Precisely in the same way the Germans employ for their ordinary negative of answers the compounded *nein*, i.e. *ne ein*. So we too have an adjective written most fully as *none* (i.e. *ne one*), more commonly *no*. Again the Romans had the compound adjectives *ne-quis*, *ne-cuter*, aft. *neuter*, *n'ullus*; the sb. *ne-mon-* (corresponding in both parts to the G. *nie-mand*); the adv. *n'unquam*, *n'usquam*, together with the verbs *ne-queo*, *ne-scio*, and *ne-uolo*, aft. *nolo*.

In the Teutonic family verbs compounded with this negative are far from rare in the older dialects. Thus in A.-Saxon there are found *nīs* 'is not,' *nās* 'was not,' *ic nāt* 'I wot not,' with *ic wat*; *nitende* 'not knowing,' *ic nah* 'I own* not,' with *ic ah* 'I own;'

* *I owe not* would have been a truer form, as in Shakspeare's (Lear, 1, 4):

"Lend less than thou owest
Ride more than thou goest."

Even those who have charge of the text of the Bible have taken the liberty of substituting *own* for *owe* of the old translation.

ic nabbe 'I have not;,' *ich nelle* 'I will not,' with a perfect *nolde*. Several of these were available for Chaucer, as (v. 2705):

Al be it that this aventure was falle,
He nolde nought discomforten hem alle.

Jamieson again gives for old Scotch *nam* 'am not,' *nar* 'were not,' *nas* 'was not,' *nat* 'wot not,' as well as *nold*.

Lastly, we once had in common use *nilly willy*.

The ordinary negative *not* looks like a simple word; but it is of course a compound, as shown in the Go. *ni-vaiht*, A.-S. *nawiht*, G. *nicht*, and our own *naught*; and Chaucer still preserved the guttural aspirate, as (v. 2070):

I saugh how that his houndes han him (Actaeon) caught
And freten him, for that they knew him naught.

Similarly Rob. of Gloucester wrote *noght*, R. Brunne *noght*; and the old Sc. has *nocht* (Jamieson).

Again it is because the L. *non* is a stronger word than *ne* that it is habitually used with the indicative, while *ne* is preferred for the subjunctive, except indeed when this mood is used to denote a result, and then the subjunctive usurps the character of the indicative. So too if an independent strengthening word be employed, then *ne* again comes into play, as in the L. *ne . . quidem*, and the Fr. *ne . . pas*, *ne . . point*, *ne . . rien*.

Another characteristic of the negative is its tendency to a close union with the word it affects. This has already been seen in the preceding compounds; but I may add such constructions as: *quaero quis aut de misera uita posset gloriari aut de non beata* (Cic. fin. 3, 28); *nec satis est iudicare quid faciendum non-faciendum-ue sit* (ib. 1, 47). The same is seen in the use of *ovk* as a particle never accented. So far *non* is a proclitic, but we have an enclitic in *cannot*, *can't*, *won't*, *shan't*, *don't*; Sc. *canna*, *dinna*; and even when the words are written apart, *not* is still an enclitic or proclitic for the ear.

As to the origin of the words denoting negation, it seems difficult to conceive that such should have been the power of any word at the outset. The L. *minime* is an intelligible approach to the idea, but still not in itself a true negative. The verb *careo*

too eventually signified negation, but obtained this meaning in an indirect manner (S. p. 10). The so-called *a* (*av*) *privative* appears to have had for its first meaning 'male,' and so gained its idea of negation, just as *male-sanus* did. But the simplest symbol, it seems to me, for the purpose is what denotes removal, as in *a-mens de-mens*, and the lost *ab-oculus* implied in the Fr. *aveugle*; and the very form of *ne* gives support to the theory, as being only a variety of *de*; nay *de* itself is a corruption of *ne*, as being a decapitated *inde*, and this itself a substitute for *inn-e* (Essays, p. 70). Thus the L. *ne* 'not' is I think one with the S. *ni* 'down'; and indeed the form *ni* itself is known to the L. language not merely in the compounds *ni-si*, *ni-hil*, but as an independent word in the old language, as in CIL. 197, 20; 199, 30, etc.; and in: P. Octavi A. l. ossa heic sita sunt . . . sacrum ni uiolato, inser. Or. 1241. *Nei* too (= *ni*) occurs eleven times in CIL. 198. Lastly let me note a phrase which was heard last summer at Hastings. A servant-maid, speaking of a little grandson of mine, said (not in my hearing), "He is such a sweet boy, one can't be *off* loving him." This *off* goes far to confirm my theory.

CHAPTER XXX.

CONJUNCTIONS.

THIS term is somewhat vaguely used so as to include classes of words essentially different, viz. : 1. Those which unite individual words or phrases or sentences, without in the last case any subordination of the one sentence to the other, which may be called *copulative* conjunctions. Such are the words *καί, τε; et, que, atque; aut, uel, an, ne*; and our own *and, or*. 2. Those which head a clause, that is subordinate to a main clause, as *si, quum, antequam*, and our own *if, when, before*, when used as = ‘*antequam*.’ 3. What might perhaps be more suitably called, ‘interrogative adverbs,’ whether employed in direct or indirect questions, as *quando, ubi, ut*, and E. *when, where, how*.

Those which constitute the first section have all been considered either in this volume or in the Essays (pp. 149–184). Thus I have given reasons in detail for the belief that *καί, τε, et, que*, and even our own *and*, are all of one origin, proceeding from a common form something like *quet* or *ket*; but I have a few matters to add. Already in this volume (p. 353) I have noticed that the Dutch *en* serves as an intermediate link between L. *et* and E. *and (an)*. This connection is again perhaps supported by the forms of the Umbrian *enem, ene, eine*, and the Osc. *inim* (A. K. 1, 136). But these Umbr. and Osc. particles the scholars to whom I am referring hold to be derivatives from the demonstrative pronoun which in Umbrian appears as *eno*; and to this I am inclined to assent, for in the first place it falls in with my ideas to assign an initial guttural alike to the particle *et*, as just stated, and to the pronoun. Secondly the notion ‘this’ gives

a fairly reasonable explanation of the conjunction. Take for example such a sentence as: *admirari soleo Caesaris gravitatem et iustitiam et sapientiam*, I am wont to regard with admiration the high principle of Caesar, the same with his sense of justice, the same with his wisdom.

The *L. aut*, *an*, *ně*, and *E. or*, have all much that is common in meaning, and though very different in form, I hold them with confidence to have had a common origin. For the detailed evidence I must refer to the Essays; but I may here briefly state that I regard them as corrupted severally, *aut* from *alterum* (cf. Fr. *autre*); *an* and *ne* from a common *anne* (for *annis*), and *or* from *other* (cf. G. *oder*), so that in all of them we have words which in their full form were comparatives, signifying 'one of two,' and so = the G. *and-er*, the comp. of *ein*. Let me now add to the little party the Gr. particle η ; and here I include both η , the equivalent of *aut*, and η the equivalent of *an*. The difference of form between η and *an* seems but slight, especially when we keep in view that *an* itself in the old L. language had a long vowel, as indeed might be expected from its origin in *anne*. For the fact I have already referred to a line in Terence (*Haut.* 5, 2, 46), where the Bembine MS. has *an*, not *anne*. I believe too that Catullus accepted *an* as having a long vowel, when he placed it at the head of a line in one of his hendeca-syllabics (40, 5), for he also, I contend, held the first syllable in this metre, like Martial and others, to demand a long quantity. Be this as it may, η for $\eta\nu$ in the sense of L. *an*, would be no way more violent than η for $\eta\nu$ in the sense of *eram*. Let me further add that the old form $\eta\epsilon$, preserved by Homer, represents the fuller *anne*.

The conjunctions of the second class, viz. those which, as though in command, head secondary clauses, call for little remark, as in respect of form they for the most part are either pronominal adverbs, or else prepositions, in the latter case often calling in aid some pronominal adverb, as *antequam*, *prout*, etc., or even two such pronouns as *post-ea-quam*, *propter-ea-quod*; and the reason for this is perhaps deserving a thought or two. When a preposition is so used with a noun, we have simply to connect the two words, adding in most languages a suitable case-

ending, as *post-cenam* ; but when a whole clause is to be attached, the increased length of the adjunct seems to invite the insertion of some word signifying 'this'; and Horne Tooke I think was right when he so interpreted our *that* in such a phrase as "I wish you to believe that I would not hurt a fly," which is resolved by him into "I would not willingly hurt a fly: I wish you to believe *that*." A mathematician might have expressed it by a 'vinculum': I wish you to believe [I would not hurt a fly]. At any rate in his own language he reads $a \times b$, a into b ; but if we substitute for b a quantity containing more than one term, a pause is required in reading, and a vinculum in writing, as: $a \times \overline{b + c}$, which is read a into $\dots b + c$. Precisely in the same way if a long infinitival clause be attached to a Latin verb, something is gained, if as a forerunner to it we insert a pronoun, as *hoc, ita, sic*. Thus Terence says: Hoc scio, esse meritam ut memor esses sui; and Cicero has, Velim ita statutum habeas, me tui memoriam cum summa benivolentia tenere (fam. 6, 2, 1); and: sic habeto, neminem esse qui me amet quin idem te amet (ib. 16, 4, 4). Hence probably the general habit of so attaching to prepositions some pronominal form signifying 'this'; and here I am only giving to such forms as the L. *quam, quod, ut*, Gr. $\delta\tau\iota$, the first meaning which I claimed for the relative in the 25th chapter. It is scarcely necessary to quote examples of prepositions converted into conjunctions by the addition of a pronoun, which abound in modern, as in ancient languages, as: It. *perche*, Fr. *puis-que, par-ce-que*, G. *nach-dem, in-dem*. In Greek the particle η is thus turned to account, so that to the L. *prius-quam* corresponds $\pi\rho\upsilon\nu\ \eta$; and this η is the analogue of the L. *quam*, corrupted no doubt from $\acute{\eta}\nu$. For the loss of the nasal we have two parallel cases in what was but now adduced, $\eta = \alpha\nu$, and η for $\eta\nu = \epsilon\alpha\nu$; while the disappearance of the aspirate is precisely what occurred in that other pronominal adverb $\epsilon\iota =$ L. *si*. For the perfect identity of meaning between this η and the L. *quam* it is abundantly enough to quote the examples in L. S.'s lexicon, as $\alpha\lambda\lambda\omicron\varsigma\ \eta, \epsilon\nu\alpha\iota\tau\iota\omicron\varsigma\ \eta, \tau\eta\ \upsilon\sigma\tau\epsilon\rho\alpha\iota\alpha\ \eta$, etc. In our own language the particle *that* is by preference omitted, and thus "before that he had returned from abroad" can scarcely be tolerated. But it

is not only to prepositions that a particle like our *that* is attached ; it is also used with participles, as in the Fr. *pendant que . . .*, which grew out of a phrase in the ablative, *pendente hoc*, just as our *during the war* corresponds to a barbarous L. *durante bello*. Nay in English we may attach a pronoun to the adverb *now*, so as to form a conjunction, as : “now that he had gained his object, he . . . ;” though even here familiar language would allow the omission of the pronoun, “now he had gained his object, he” The use of *that* by our old writers in such phrases as *when that, if that*, seems not to fall under the present head.

Our pronoun *if* has often been interpreted as corrupted from *give* ; and this seems at first sight to be confirmed by the Scotch use of *gif* (*geue*) in the same sense, as : (Douglas’ *Virgil*, ap. Jamieson)—

Gif they haue sic desire to Italy,

Do lat thame beild thare ciete wallis square.

And the familiar “Gin a body meet a body, etc.,” where *gin* is thought to be one with *given* (= *hoc dato*). The A.-Sax. too I find has a form *gu* ‘if.’ Yet after all Jamieson seems right in doubting the value of this etymon, seeing that the Gothic has *jabái*, which seems to be connected with the G. *ob* ‘if’ ; and so with the Scandinavian *ef* and *om* of like power.

There was a time too when the L. *si* was thought to be connected with the subj. *sit*, and *et* also was in like manner referred to *ετι* ; but here there can be little doubt that the particle is of the same stock with the third person pronoun ; and indeed I venture to identify L. *si* with G. *wenn*, seeing that *sin* is the truer form of the L. particle, and as the Go. representative of our *so* is *sra* or *své* (D. G. 3, 164), so *swin* might well be a Teutonic variety of *sin* ; and from *swin* the G. *wenn* is not very dissimilar. It should be remembered too that the notions of *when* and *if* are not far removed from each other. Thus in Latin *si* with the future perfect seems often to signify ‘when,’ as : *si mi argentum dederis, te suspendito*, Pl. Pers. 4, 7, 131 ; add Capt. 2, 2, 1, and Cic. Verr. 2, 3, 10 ; Off. 2, 22 ; Sen. ep. 78, 3.

CHAPTER XXXI.

INTERJECTIONS.

To call an interjection a separate part of speech seems to be altogether an error; and indeed the term is applied in very different senses. By its etymology one is led to believe that it was originally used of those words or phrases which are thrown in parenthetically, often by way of asseveration, or a sort of oath. In the latter case they are for the most part cut down, more or less, from a fuller and intelligible sentence; and sometimes even to a single syllable. Thus in Latin *Ita me Hercules adiuvet* is corrupted into *mehercules mehercule mehercle mercule hercle*; *Ita me deus fidius* (= θεος πιστιος, rather than Διος filius) *adiuvet*, to *medius filius*; *Ita me Deus Pollux* to *edepol epol*, or even *pol*; and similarly are used *mecastor ecastor eiuno ecere* from the names of *Castor Juno Ceres*. So again in modern times the oath *By God* has become *by Gosh Egad Ecod* and *Gad* alone. *Odds-life*, *odds-blood* have superseded *By God's life*, *By God's blood*; and by a still more violent change we have *s'blood*, *s'death*, and *zounds* or *zouns* for *God's wounds*. Shakspeare has *by-r-lakin* for *by her ladikin*, and *marry* for *Mary* was once in common use; and our old writers through French influence were fond of *perdy* or *pardi* for *par-dieu*. *In faith* again passed first into *i-faith* and then to *faith*.

But religious forms were also freely used under the sense of wonder, as an appeal to heaven's protection, as *Lor* or *Lud* as an abbreviation of *Lord*; *good gracious me*, *goodness me*, *dear me*, *O my gracious*, *good gracious*, all abbreviated from some such form as 'may God's goodness protect me.' Possibly παπαι (βαβαι), when expressive of wonder, and the Latin *papae* were nomi-

natives meaning properly 'fathers,' and so used it may be of gods, it may be of priests. At any rate *ye Gods* gives an equivalent phrase for English.

But the term interjection is applied in other senses, and especially to those involuntary exclamations of man under pain; and here I cannot do better than quote from Mr. Wedgwood (*Pr. Ph. Soc.* vol. ii. p. 115):—

"The effects of cold and terror on the human frame seem very nearly identical. The shoulders are shrugged forwards, and the arms and closed hands pressed against the chest, while all the muscles of the face are kept rigid. The deep guttural sound uttered under these circumstances is imitated in English by the interjection *ugh!* expressive of cold or horror. The variations of this sound given by Grimm (iii. 298) are *hu! hu! hu! schu! shuck! husch! hutsch! u! uk!* expressive of cold. From this interjection we had in old English and Scotch a verb *to ug* 'to feel abhorrence at,' 'to nauseate' (Jamieson).

'The rattling drum and trumpet's tout
Delight young swankies that are stout;
What his kind frightened mother *ugs*,
Is music to the soger's lugs.'

"In a passage of Hardyng cited at the same place, it is said that the Abbess of Coldingham, having cut off her own nose and lips,

—— 'counselled all her systers to do the same,
To make their foes to *houge* so with the sight.
And so they did, afore the enemies came,
Echeon their nose and over-lip full right
Cut off anon, which was an *hougly* sight.'

"Jamieson rightly observes that this passage points the origin of our *ugly*, *ugsome*, i. e. what makes the spectator cry *ugh!* what causes abhorrence The same root appears extensively in the Gothic tongues, as in the Icel. *uggr* 'dread'; *oga* *abominari* (*gruer* for, Dan.), precisely equivalent to the Old-English *to ug*, *ogna* or *ogra* 'to terrify,' etc."

Again the same writer says:—"The interjection of aversion

fie! phui! is originally in all probability the expression of disgust at an offensive smell, the physical effect of which is to make us close the passage through the nose and expire strongly through the compressed lips—faugh!”

And soon after he proceeds:—“From the physically to the morally offensive is an easy step, leading us to the Goth. *fijan*, Isl. *fiá* ‘to hate,’ whence our *foe*, *fiend*, *feud*. To proceed with Tooke in the converse direction, and derive the interjection from the verb, seems a strange inversion of the natural course of language.”

The Latin form of this interjection is *fu*, as now established in the text of Plautus (Ps. 5, 2, 11), and agreeing with the Gr. *φῦ* as used in the same sense by Aristophanes. Mr. Wedgwood’s derivation of the vb. *fijan* to hate from the offended sense of smell, is in keeping with the origin of *ōdi*, literally ‘I have smelt’ (him once, and shall never forget the smell), I hate (him); and thus *ōd-or* and *ōd-ium* are cognate words.

The E. *pooh*, with the variety G. *ba bah*, and E. *bah*, as well as *pshaw*, still denote disgust, though of a lighter kind, and so may well be of the same origin.

The cry of pain, whether it take the form of G. *ach*, Lat. *ah* or *a*, E. *ah* or *oh*, is no doubt the source of the Gr. *αῖος* etc. and of our own *ache*; and as Mr. Wedgwood observes, takes a still stronger form in the G. *weh wehe*, A.-Sax. *wa*; whence the nouns, G. *Weh*, E. *woe*, L. *uae*; and the verb *wail*. The Greek *οἶμοι οἶμωζω* too begins with a letter all but one with a digamma.

But these words of involuntary exclamation are a class by themselves, and no way connected with those which I next proceed to speak of, words which are addressed to others either calling their attention or giving orders more or less directly. These are for the most part imperatives of verbs, often much disguised; or vocatives; or it may be pronouns; and short as they are they really express a whole sentence. The Latin *eho* means literally ‘hither,’ and is but an older form of that *ho* which with the demonstrative enclitic *ce* forms *hoc*, aft. *huc*. Its object is simply to call a person to one, as in ‘*eho Pithecium, face ut accumbam, adiuta*’ (Pl. Truc. 2, 5, 24), here come and help me

to lie down; or to call attention to a coming order, *Eho Pseudule*, *i, gladium adfer* (Pl. Ps. 1, 3, 114); or to an important truth: *Eho tu* (look here, sir), *Di quibust potestas . . . conferunt concordiam*, Enn. trag. 163, V. But perhaps the most important use of it is in company with *an* to draw attention to a coming question resulting from some unexpected statement, as: *Eho an libera illast?* What, then, is yon girl a lady? Pl. Epid. 3, 4, 69; in which combination by the way *Eho an* constitutes but a single syllable, such as *yoan*, and should not, I think, be written *extra versum*, as is the practice of Ritschl. This *eho* may possibly be one with the Germ. *heh he*, and constitute part of the Fr. *ho-la*, and *holla hulloa*.

The adverb *thus* on the deck of a man of war is used in the sense of 'stop, avast,' and gains this meaning from first signifying, 'so as you now have it is just right.' It was from this use of the word that the Howe line-of-battle ship had, perhaps still has, *THUS* on her stern, to denote 'perfection.' Perhaps the first part of *Soho* may be of the same origin, = *so*, *hold*.

The so-called interjections *eu* and *euge* were of course borrowed from the Greek *ευ* and *ευγε*, and this probably through the theatre, like *palin* in Plautus, corresponding to our *encore*, and *bravo*, borrowed in the same way from the Fr. and It.; but the Gr. *ευ* is of course only an adv. = well, and probably the same word as *well*, as a final *λ*, inadmissible for a Greek, would no doubt give place to a *υ*, as in *ελελελευ*.

But not a few so-called interjections are imperatives. The Latin *ecce* and *en* are of course such (see p. 340), and the latter not the less so, when written as *em* or *hem*. *Proh* (*pro*) seems to be used only in the sense of horror;* and, this being its meaning, I regard it as possibly shortened from *prohibe* 'heaven avert it.' *Au*, as Donatus says, the exclamation 'perturbatae mulieris,' is of similar power, and so may be abridged from *aufer* or *aufer te*, 'none of that!' 'be off!' This sense agrees with every passage where the word occurs in Terence; and the references in our dictionaries to Plautus are simply so many errors, for he never

* In Plaut. Cas. 2, 1, 1, *proh* is now cancelled.

has the word. *Heus* 'harkee' by its very meaning claims to be an imperative; and so like *fer fac* etc. stands for *heuse*, which points to a theme *haus-*, the vowel having suffered 'umlaut.' The old noun *aus-is* (*auris*) and the vb. *ausculta-re* (*aus-ic-ul-itare*) imply a vb. *aus-* = *aud* of *audio*. But these are one with our own *hear* and *ear*, so that an initial *h* in this word offends not. I have at times thought that *eia* (*heia*) may be a corruption of *edin*, *audin* 'd'ye hear,' for *au* of this verb passes into an *ē* in *ob-edi-re*, whence Fr. *obeir*, E. *obey*, while the final *a* is no bad substitute for a nasal syllable, as in *εἶνεκεν*, *εἶνεκα*. The meaning will suit many of the uses of the word. Thus in Terence (*Haut.* 5, 5, 19), when Clitipho rejects the proposal that he should marry the daughter of Phanocrates with the words, *Rufamme illam uirginem? non possum pater*, the father's reply, *Hejā, ut elegans est!* may be translated, Do you hear that? how particular he is; and the same will suit Horace's *Eia quid statis?* But here I am bound to keep in view the Gr. *εα*, and I wait for the judgment of Greek scholars; at the same time it must not be assumed that the *a* was a short vowel, as is said to have been the case in the Greek particle, for it has a long *a* in

Périgin tu autem? hejá superbe inuéhere. Spero ego míhi quoque.—Pl. *Merc.* 5, 4, 38.

The authority of the grammarians in such matters counts for little. Still there were those who accentuated *εá* (not *εá*); and if Probus p. 1430 has: '*eia* constat trochaeo,' in p. 1421 he has: '*constat spondaeo.*' Vergil I believe always elides the word.

Ohe 'avast,' both by its final vowel and its meaning asserts its right to be regarded as an imperative, and in fact an equivalent of the G. *halt*, E. *hold*, and *halt* as addressed to soldiers; and so I believe *ohe* to represent the Gr. *εχε* in the sense given by L. S. § iv. 4, quoting *εχε* 'stay' from Plato, for the *o* makes no difficulty for those who identify *εχω* and the L. *ueho*, seeing that the Homeric *οχσ-φι* of the same stock, not to mention *οχεω*, has this vowel. In the same way our *avast* itself seems to be a corruption from *hold fast*. The theory that *ohe* stands for *εχε* may

suggest to some that the Latin is a loan-word which found its way to Italy through nautical language; much as our own *Stop-her* has become a term for continental use through the employment of English engineers. As to quantity interjections always claim a licence. Thus if Horace (Sat. 1, 5, 12) gives the word a long *a*, Plautus makes it short in Aul. 1, 1, 16; and Horace himself uses the word as a ^{short} *tree-hee* in: donec 'Ohe iam' . . . dixerit (Sat. 2, 5, 96).

St, like our *hush*, *hist*, G. *st* and prov. *hosh*, of course bids silence, and may possibly be one with the L. *siste* or the L. *tace*; for as we have *stumble* by the side of *tumble*, the root of *tace*- may have taken an initial *s*; and such an etymology would harmonise with the Dan. *tys* of like power, and the Fr. *taisez*.

Lastly *age*, an admitted imperative, has become so petrified as to be used with plurals; and the same holds of the Gr. *αγε*, as in *ἀλλ' ἀγε ταμνετε μὲν γλωσσας* etc.; but there is no irregularity in the use of *αγε* and *αγετε* with the first person plural, as the speaker has no occasion to exhort himself. The use of *φερε* with the same disregard of number agrees with the use of *αγε*; it is less easy to explain its passage in meaning from 'bring' to 'come.' The Greek has also given a fixed form to *ιδου* and *ιδε* as equivalents for L. *ecce*, E. *lo*. This last word is another example of a corrupted imperative, shortened of course as I have just said from *look*, and one with the A.-Sax. *la* of like power (see D. G. 3, 289). Even the *o* which so often accompanies a vocative may very possibly be an abbreviation of *audi*, the root of which has an extensive domain, including the Gr. *ov-as*, G. *hören*, E. *hear*.

Vah is a difficult word to deal with. The form suggests that it represents a fuller *uade*; and this idea is encouraged by the fact that *ua* = *uade* occurs in a gloss (see Schuchardt's *Vocalismus*, p. 393). We too have a somewhat similar phrase in 'go to.' When one's pleasure is complete, one may say to the person who causes such pleasure, that he need do no more, but may go. Thus Terence (Ad. 2, 1, 33) has: *Vah* (that is perfect), *leno iniqua me non uolt loqui*; and this justifies the comment of Augustine (Tr. in Iohan. 51), *Cum delectamur, uah dicimus*. On the other hand there are passages where *uah* seems to denote

pain, as: Vah perii, hoc malum integrascit (And. 4, 2, 5); but perhaps we have here only a variety of *ah* (see above).

Lastly we have what are practically imperatives in the sounds addressed to horses etc., as directions to move to the right or left; for the former in German *hott hat* or *hut*, for the other *har* or *wist* (ib. 3, 309); while in French the corresponding terms seem to be *dià* and *hue*; and in English *gee* and *come hither*. *Wo* for stopping is also of the same kind. These words really constitute a language, however limited; and are the more interesting as they prove, that for animals other than man language is no impossibility.

The same inference is to be deduced from another class of so-called interjections, those by which animals are called to their food; and here among many terms which defy analysis are not a few which are clearly vocatives, and in fact the names more or less corrupted by which the animals in question are known. The examples I take are from Grimm (3, 309): *schäpen schäp shäp* (ad oves); *köss kuhel köss* (ad vaccas); *wuzi wuzi!* or *huss huss!* etc. (ad porcos): cf. ἴς σὺς *sus*; *gös gös!* or *gusch gusch* (ad anseres); *ant ant!* or *nat nat!* (ad anates): cf. *anates νῆττα*; *pus pus* (ad feles). And it deserves notice that in Lithuanian the call for the cat is *puz puz* or *puiz puiz*, while a diminutival name for the creature, *puize*, is all but one with our own *pussy*.

There remains yet another class of what are often called interjections, the direct imitation of sounds, as the *tick tick* of a watch, *bang* of a gun, *boom* of a cannon, *ding dong* or *ting ting* of a bell, *rub a dub dub* of a drum, the *whizz* of an arrow, the *whirr* of a gor-cock, *quack quack* of a duck, *rat-a-tat tat* of a knocker, *βρεκεκεκ βρεκεκεξ κοαξ κοαξ* of a frog, etc.

CHAPTER XXXII.

ACCENT—IN GREEK.

WHEN we speak of accent in reference to modern languages, we are for the most part of one mind; and it is equally admitted that accent is the governing principle of verse; and this not less in the poetry of modern Greece than in that of England and Germany, etc. Further we have a practical conception of what we mean by accent, whether able or not with accuracy to define such conception. No doubt an accented syllable has a special stress upon it; and some will perhaps be disposed to say that such syllable is distinguished by three qualities, greater loudness, higher note, and longer duration; and there is no violation of this principle, when we include words in which the accented syllable consists of a short vowel followed by a single mute, as *faculty*, *pitiful*, *epitaph*., for to the time taken up in the pronunciation of the syllables *fac*, *pit*, *ep*, must be added the pause that follows, *fac* . . *ulty*, *pit* . . *iful*, *ep* . . *itaph*. In these words the mute, whether guttural, dental, or labial, completely closes the channel of speech; and so too in the case of the thick consonants of *begg-arly*, *Padd-ington*, *shabb-ily*, in which the consonants are doubled for the eye, but for the ear are single. On nasals, sibilants, and aspirates, the sound may dwell *ad libitum*, as in *em-ery*, *an-imal*, *ting-a-ling*, *pos-itive*, *cath-olic*, *laugh-able*. Thus there can be little doubt as to the accent of the two verbs in Pope's line :

Cáv-il you máy but néver crít-icíze.

So far all is smooth; but the moment we show a disposition

to apply the same principle to the languages of Greece and Rome, we are in disgrace. The rhythm of Greek and Latin poetry, when these languages were still spoken in their purity, was founded, we are told, on principles essentially different from the modern accentual system. Accent and quantity, it is asserted, are distinct conceptions, wholly independent of each other. Thus the correct pronunciation of *ἄνθρωπος, κάθημαι* requires, they contend, that we should give a higher note to the first syllable and at the same time lengthen the penult. That this is perfectly possible is fully admitted; and it may be true that a Scotchman often, and a Bohemian habitually, elevates the note in certain syllables; but a doubt remains whether such raising of the note will add any beauty to the melody of verse. To what has been said perhaps an exception is to be made in favour, or disfavour of the Latin comedy, where, according to some, the modern system of regulating verse by accent is thought to be the governing principle; but of this hereafter.

For the Greek language it is commonly maintained that the little marks called acute and circumflex must be strictly observed by those who would pronounce even prose as it should be pronounced; and Boeckh, I am told by a gentleman who attended his lectures, invariably observed the accents, while he as strictly observed the quantities. The names of Hermann and Porson may also be adduced as supporters of the received doctrines in regard to Greek accents; and special essays have been written in the same sense by Foster and Pennington, both formerly Fellows of King's College, Cambridge. Matthiæ again, in his Grammar represents in musical notation what he conceives to have been the correct pronunciation; but the editor of the English translation, the late Dr. Blomfield, observes: "Whether this musical diagram may accord with the inflexions of a German voice in common conversation I cannot say, but we have nothing akin to it;" and another German, Dr. B. Thiersch, in a little essay on the nature of Greek accent especially declares: "*Mihi quidem inuenire huiusque non contigit qui secundum accentum pronuntiantes syllabarum mensuram seruarent;*" and yet he had himself visited Greece.

But if the ordinary doctrine be erroneous, whence arose the error? In the consideration of this question it is important to keep in view the distinction between accent and the marks of accent, two things more frequently confounded by enquirers than might have been thought possible. The systematic employment of the little marks I believe to have been of recent origin. After the capture of Constantinople by the Turks in the fifteenth century, the Greek fugitives were scattered over western Europe; and this scattering was one of the most active causes in reviving the study of the Greek language. But these Greeks had in their own living language a pronunciation differing, as may well be supposed, in many points from that of classical times; and hence they easily fell into the error of reading the old Greek poets, so as to give the words the accents which were current in their own modern tongue. Thus what an ancient Greek had pronounced as *ανθρωπος* (*anthrōpos*), *καθημαι* (*kathēmai*), is for a modern Greek *άνθρωπος*, *κάθεμαι*, so that the *ω* and *η*, once of use as distinguishing these vowels from *ο* and *ε*, had become utterly false guides. We have something corresponding to this in our sb. *lead*, and preterite *read* contrasted with the vb. *lead* and the present tense *read*. It had thus become almost a necessity for the Greeks, at any rate as teachers of the foreigner, to employ a notation which would counteract such misleading influence; and hence the accentual marks became a part of the written language, and so got established generally in Europe. The precise date of this introduction one cannot hope to give, but it is an established fact that the older a Greek manuscript, the more certain it is to be without them. In the Alexandrian Codex the first page alone has the accents, but this is itself a proof, that they were a subsequent addition, and certainly not written by the original scribe.

It has been recently stated that an accented line is to be found in the inscriptions of Herenlaneum, which would bring us to the first century. The line referred to is *ὡς ἐν σοφὸν βούλευμα τας πολλὰς χεῖρας νικᾷ*, as engraved at the end of Villosion's 'Diatriba'; but this is now generally regarded as a simple

forgery; and indeed the cursive character in which it is written is alone fatal to its claim to authenticity. But on this head it will be enough to give a quotation from Montfaucon, which I copy from Mr. Pennington's book (p. 84):

"Hæc omnia (the accentual marks) ante septimum sæculum a librariis neglecta prorsus videntur, nam codices uetustissimi quinti sextive sæculi iis prorsus carent; quæ ante septimum sæculum, in solis grammaticorum libris observata fuisse videntur."

That the vowel-marks η and ω , ϵ and $ο$, are no longer in Greece used with their original distinction is a well-known fact; but in proof of this I will quote a couple of stanzas from a rhymed translation of the Russian poet Kriloff's fable of the cuckoo in a Greek periodical of 1848, in which the metre (A captain bold of Halifax who lived in country quarters) will soon prove that the rhythm is founded on accents with little regard to the old quantity:

Ἡ ἄστατος, ἡ σύζυγος τοῦ Κούκου ἐπὶ κλόνου
 Ἰτέας ποτ' ἐκάθισε καὶ γοερῶς ἐθρήνει·
 Ἡ γείτων της περιστερὰ τὸ αἶτιον τοῦ πόνου
 Τὴν ἐρωτᾷ καὶ διατὶ κρουνοὺς δακρύων χύνει;
 Μήπως, καλὴ γειτόνισσα, τὴν ἀνοιξὶν λυπεῖσαι;
 Τοῦ ἐραστοῦ σου μὴ θρηνεῖς ἴσως τὴν ἀπιστίαν;
 Μήπως ἐπιβουλήν τινὰ τῶν κυνηγῶν φοβεῖσαι;
 Ἡ μήπως περιέπεσες εἰς τὴν σκληρὰν χηρείαν;

where we find short penults in *ερωτα*, *γειτονισσα*, *ανοιξιν*, *εραστου*, *θρηνεις*, *επιβουλην*, *κυνηγων*; and on the other side long penults in *ιτας*, *δακρυνων*, *απιστιαν*. The shortening of long vowels is the ordinary habit of language; and as to the second set there is only the revival of old forms, *ιτειη* *δακρῶ* and *απιστῆ* having good classical authority. I may note too that the η of *εθρηνει* and υ of *χυνει* have now the same sound, so that the rhyme is perfect.

But already in the twelfth century iambic tetrameters catalectic, like the above, with a rhythm founded on the same principle, were written by Tzetzes, and this on no trifling scale,

for his *Συνοψις ιστορικη* contained 6733 verses. Of these it will be sufficient for our purpose to give a single line, as :

Ὅποσον δύναιτο λαβεῖν ἐκέλευε χρυσίον,

with its four violations of classical quantity; but again the lengthening of the two short vowels has something of a justification in *quantus* (= ποσος*) and χρυσίος. In fact modern Greek seems often to combine Ionic sounds with Attic writing. Thus Tzetzēs wrote βασιλέως but said βασιλῆος (cf. κλόνον πόνον above; perh. for κλουνον πουνον).

We have then distinct evidence that there is a wide difference between the rhythmical laws which Tzetzēs observed in the 12th century and those to which Homer, Aeschylus, etc., paid obedience. To what was this difference due? A writer of mark, in the first number of the 'Cambridge Journal of Philology,' would explain the change by a cataclysm. "It was probably," he says, "in the fourth or fifth centuries, in the general cataclysm which befel the ancient world, that the barbaric confusion which had long been growing among the vulgar finally pervaded palace, convent, and school. Thenceforward the rhythm of all popular poetry, such as it was, in both languages, was founded of course upon the modern accentual system." So in geology cataclysms were once in favour; but Lyell has long taught us, that the best explanation of the apparently sudden and violent changes of our globe in the past is to be found in the assumption of the existence of those same causes which we still see at work around us. Let us consider then whether we can take a hint from the history of geological science. Now it is a principle in philology, never to be too strongly dwelt upon, that here too, as everywhere, time is ever busy in altering the face of things. In our own tongue we are all aware that the most extensive changes have quietly worked their way since the days of Chaucer,† of Shak-

* Cf. the letter-change in *uiginti* εἰκατὶ εἰκοσι.

† Thus I happen to have noted in reading Chaucer but carelessly *certáyn*, *cheríce*, *colóur*, *feláwe*, *fortáune*, *honést*, *lyóun*, *libárdes*, *manére*, *merwáyle*, *parsóun*, *prisóun*, *subyéctis*, *towáil*, besides numberless cases of

spere, and even of Milton. In Latin again the forms of words and the laws of Prosody underwent many alterations between the times of Ennius and Plautus on the one side and Juvenal and Prudentius on the other. But in the Greek tongue, in which we now possess a series of writers extending over a space of nearly three thousand years, we may well expect to find the differences more strongly marked.

These very changes however are themselves subject to certain general laws, one of the most important among them being the tendency to abbreviation of all sound, which itself is only a particular instance of a still more general law, that man always endeavours to economize his labour. Thus, as Hermann has pointed out, we have a series of changes in the pronunciation of the name *Oùeus*, which has always three syllables in Homer, but two in Euripides, while in Lycophron it is written *Ιλeus*. Plautus makes the first syllable of *Achermās* generally, if not always, long; and treats *mīluus* and *grātīs* as trisyllabic words, with the first syllable long; but these soon gave way to *Ācherwās*, *mīluus* and *gratis*. Again *magis potis pater* were in old times iambs, not pyrrhics, and this list might be greatly extended. But changes in accent and quantity often take place without any external sign to bear witness to them, and so far stand at a disadvantage compared to those changes in written form, which for the most part exhibit themselves in books; in other words orthography is frequently in arrear of orthoepy, so that many letters are still written in words though practically dropped in sound. Thus *n* was preserved in many Latin words before *s*, though no longer sounded, as in *Hortensius Megalensia totiens consul insanus constare*; and we ourselves still write *receipt* with a *p*, *talk walk would could* with an *l*, *phlegm sign* with a *g*, *puisne judge* with an *s*, *sight* with *gh*, *gauge* with a *u*. Why then should we be surprised that the modern Greeks retain the *ω* and *η* in the penults of *ερωτα* and *κυνηγον*, though these penults have now become short?

words in *té* like *charité* in which he preserved the French alike in spelling and accent, whereas the present habit is invariably to throw the accent on the antepenult or penult, *chárity, pítý*.

But changes of this nature may be traced occasionally through the whole period of Greek literature. The words *ερημος*, *έτοιμος*, *δμοιος*, *ακρατος*, *τροπαιον*, are repeatedly the subjects of remark in Eustathius, Suidas, and the Etymologicum Magnum. Eventually they had an acute accent on the antepenult; but in older writers had a circumflex we are told on the penult, which agrees with the pronunciation commonly prevailing in England. Thus Suidas (s. voce) says that *τροπαῖον* was the accentuation of the *παλαιοὶ Ἀττικοί*, viz., Eupolis, Cratinus, Aristophanes and Thucydides, whereas Menander preferred *τρόπαιον*. Again *ερήμος* is more than once ascribed to Homer by Eustathius (pp. 258 and 748, ed. Basil.), and also in the Etym. Magn. (s. voce); but says the latter *παρὰ τοῖς Ἀττικοῖς προπαροξύνεται*. Now how did Suidas know that Aristophanes pronounced *τροπαῖον*? Above all how did Eustathius know that Homer pronounced *ερήμος*? He would be a bold man who would contend that a statement to this effect had been handed down from the time of the poet by tradition. Still bolder he, who should assert that accentual marks were already affixed in the days of Homer. How then I repeat did Eustathius, who is said to have lived in the twelfth century of our era, arrive at the knowledge? Common sense answers from his own consideration of the poet's metre, precisely as Grimm makes similar inferences as to the pronunciation of old Teutonic poets from their verses. The same holds good for Suidas and similar commentators. But if this be so, we of the present day are as well qualified to draw our own conclusions as Eustathius; and so when the accentuation of *Ἀπες Ἀπες* (Il. v. 31) is in question, any one who would prefer, as Eustathius tells us Ixion did, *Ἀπες Ἀπές* to the favoured *Ἀπες Ἀπες*, has as good a right to his opinion as Eustathius himself had. But yet another step is gained, and that the very point for which we are contending, that metrical accent and quantity are intimately connected.

with that of another

But besides comparing the Greek of one age it may be useful to observe the way in which Latin words were transliterated by Greek writers. Now the Latin *comites* having become a regular title, like our own *Count*, was written at Byzantium in the form

κομητες (κόμητες), which would never have been tolerated had the η then denoted a long vowel. Then my friend Mr. Bywater supplies me with the following from C. F. Weber's 'De latine scriptis quae Graeci veteres in linguam suam transtulerunt,—Cassel, 1852' (part iii. p. 43): "Imperatore incedente comes officiorum eos qui adstabant de adventu plerumque admonebat verbis: κάπτατε δόμνην, *captate domini*, i. e. attendite; imperatore ad magnam ecclesiam accedente in nativitate Christi cancellarii Quaestoris cantabant: Δὲ Μαρία Βέργηνη νάτους, ἐτ Μάγι δὲ ὠριέντε κοῦμ μούνερε ἀδόραντ, *de Maria virgine natus, et Magi de oriente cum munere adorant*. Ubi imperator mensae accumbebat cum amicis qui ad convivium erant advocati, quinque cantatores (βουκάλιοι) latino sermone vocabant: Κωνσερβετ Δέους ἡμπέριουμ βέστρουμ, ὃ ἐστι μεθερμηνευόμενον· φυλάξει ὁ θεὸς τὴν βασιλείαν ὑμῶν; tum cantor quintus: βόνα τοῦα σέμπερ, ὃ ἐ. μ. τὰ ἀγαθὰ σου διηνεκῶς; porro quartus: βίκτωρ σῆς σέμπερ ὃ ἐ. μ. τροπαιοῦχος ἔση αἰί; postea tertius: μούλτους ἄνους φικίδιαθ [something wrong here apparently] Δέους, ὃ ἐ. μ. νικοποιόν σε ποιήσει πάντοτε; deinde secundus: βίκτωρ φατζία [sic] σέμπερ, ὃ ἐ. μ. νικοποιὸς ἦς πάντοτε; postremo primus: Δέους πρένστεθ, ὃ ἐ. μ. ὁ θεὸς παρέξοι. Ubi imperator aquam vino mixtam bibebat, cantatores acclamabant: βήβητε δόμνην ἡμπεράτορες ἦν μούλτος ἄννος. Δέους ὁμνήποτενς πρέστεθ, ὃ ἐ. μ. πίετε, κύριοι βασιλεῖς, ἐν πολλοῖς ἔτεσιν· ὁ θεὸς παντοδύναμος παράσχοι."*

Conversely, it was long ago noticed by Scaliger that Latin poets in borrowing Greek words adopt that metrical value which is implied in the accents, giving these a preference over all claims on the part of what would have been syllables long by nature or position, so that we have again evidence of early changes in Greek pronunciation. For example Plautus in the *Curculio* (1, 1, 2; 1, 1, 24; 1, 3, 25; 2, 3, 22, etc.), in adopting the Greek name Φαίδρωμος, assigns to *Phaedromus* always a short penult. Of the name *Philippus* (Φίλιππος) Scaliger remarks: "numquam aliter invenies apud Plautum quin mediam corripuerit." So again Ritschl (*Trin. Proleg.* p. 123): "et

* The Greek quotations from Constantinus Porphyrogenitus 'de Caerim.' i. 74-76.

singularem et constantem rationem esse Philippi vel Philippi nominis constat." Probably they should have limited this remark to the cases where a coin, 'a golden Philip,' is meant, and of this there are some thirty examples (in the Bacchides alone thirteen); for the quantity is otherwise in the Aulularia (1, 2, 8) where the king himself is spoken of; in which line by the way the short penult of *Darium* seems to tell me, that the accent of the Greek form had passed from *Δαρείος* to *Δάρειος* or *Δάριος*. Then in the Truculentus (1, 1, 60) Spengel seems to be in error when on metrical grounds he condemns the line: "Phronésium nam phrónesis est sapiéntia," saying that not even a gloss-writer could have shortened the penult of *φρόνησις*. In the Menaechmi again (1, 3, 29) Ritschl first gave: "Mádida quae mihi adpósita in mensa *míluinam* súggerant," on the theory no doubt, though rather a bold one, that *famem* is understood. The Ambrosian has *muluinam*; and Bernays (V. Ritschl, op. 2, 599 n) conjectured *bulimam*, on the authority of Paulus ex Festo; "bulimam Gracci magnam famem dicunt." On this hint Ritschl recommended the reading: "Mádida quae antepósita in mensa míhi *bulimam* súggerant," in which however the transposition gives the pronoun *míhi* undue emphasis. But the only change required was to write, not *bulimam*, which Scaliger justly regarded as an error in Paulus, but *búlimíam* (*βουλμιάν*), ^{for *ἐλμιάν*} which by virtue of its accent would have a long penult for Plautus, or possibly we should read *mulimíam*, for a Greek word in passing through a Roman ear to a Roman mouth might easily interchange the labials; and then the reading would be all but identical with the palimpsest. We are directed in Greek to write *γυναικέιον*, *βαλανείον*, *πλατεῖα*, but as these in Plautus appear as *cinecĕum*, *balinĕum*, *platĕa*, I am tempted to infer that, as *εῤῥĕμος* passed to *ἐρῥĕμος*, and in Christian writers to *črĕmus*, whence with the utter loss of the vowel comes our *hermit*; so in the days of Plautus, however written, *γυναικειον*, *βαλανειον*, *πλατεια*, had shortened the penult; and I say so with the more confidence, when I find *κηρύκειον* written with an acute on the antepenult, nay even with a short penult *κηρύκιον* in Aristophanes (frag. 429); and thus the quantity of the Latin variety *caduceus*, for a masc.

καρνικός, has already for the quantity of the penult its justification on Greek soil; and in the same way ^{corrected} κωνοπέϊον had probably changed its accent before it was transferred in Latin verse to *conópium*. And so we must not condemn those lecturers on anatomy who now talk of the *trachēa* (τραχεια), for they are probably giving the word what already in the time of Plautus was the ordinary pronunciation in Greece. Ovid again (*Met.* 8, 207) having heard *Ὠρίωνος* pronounced as here accented writes *Strictumque Oríonis ense*. In the hendecasyllabics of Sidonius we find the following instances of the same principle: “*Ευριπίδης*, *Orchestra*m quatit alter *Euripídes*; *Μαρσύας*, *Marsyae*que timet *manum* ac *rudentem*; “*Ἄρατος*, *Diuersas* *Aráto* *uias* *cucurrit*.” In Ausonius the accents of *τρίγωνος* *τετράγωνος* have led to such lines as: “*Per totidem partes trigonorum regula currit*,” and: “*Fulgur tetragono aspectu uitale cucurrit*.” Lastly Prudentius invariably shortens the penult not merely of *eremus*, as above stated, but also of *idōla* (εἰδωλα). Indeed the Grammarians have themselves distinctly laid down the law. Thus Diomedes (433, 4 K.), “*Graeca uerba Graecis accentibus efferimus, si isdem litteris pronuntiauerimus*,” and Servius (*comm. in Donatum*, 427, 10 K.): “*Graeca uerba tunc Graecis accentibus proferimus, cum Graeca fuerit declinatio*.”

Thus we have good authority for believing that already in the best period of Grecian literature those changes from longer to shorter forms were working their way, and continued so to do for many centuries; so that we have little occasion for the assumption of ‘a cataclysm’ in the so-called middle ages.

It will probably have been seen that all the evidence thus adduced points to the conclusion that there is the same intimate connection between accent and quantity in the pronunciation of Greek and Latin of the best ages, as there is in English and modern languages. An intimate connection between the two ideas is asserted in the most unqualified manner by Sergius, or whoever is the author of the ‘*Explanationes artis Donati*’ (p. 528, 28 K.): “*accentus proprie qualitas syllabarum est, hoc est, indicium temporis syllabarum naturam positionemque significans*.” Not however that accent and quantity are exactly

one, for words have commonly but one accent, while there is no such limit to long syllables. *Clamas* and *clamamus* begin with two long syllables, *clamabas* has all three long; but the accent in these forms belongs to the penult alone, *clámas*, *clamámus* *clamábas*. Moreover the very words *accentus* and *prosodia* assert their close relationship, for the Latin term is but a translation of the Greek. Let me next confirm what I have just said by a few quotations from Greek grammarians which I take at second hand from Mr. Pennington's treatise, as he from Primatt's work on Accents. A scholiast on Hephaestion (Pr. p. 69) speaking of *óφης* as the last foot of an Homeric verse has the words *τῆς ὀξείας μεγκυνούσης τὸ ὄ*; Dionysius Thrax (p. 71) has: *τόνος πρὸς ὃν ἄδομεν καὶ τὴν φωνὴν ἐρύττεραν ποιοῦμεν*; Hermogenes (p. 76): *τοῦτο γάρ ἐστιν ἡ τάσις τὸ ἀποτετάσθαι ἐπὶ μακρότερον ἢ χρὴ τὸ πνεῦμα*; Hesychius again (Praef. p. xv.) interprets *ἐπιτείνειν* by *μεγαλῦναι*, *μακρῦναι*. Lastly, Dionysius of Halicarnassus (ibid. p. 146) gives a practical sanction to the doctrine that accent carries with it lengthened time, when, commenting on the passage of Thucydides—*Ὡς καλὸν ἐπὶ τοῖς ἐκ τῶν πολέμων θαπτομένοις ἀγορεύεσθαι αὐτόν*—he says, *ἀρχεται μὲν ἀπο τοῦ κρητικῶν ποδός*, for if *Ὡς καλὸν* before *ἐπὶ* is to be a cretic, the last syllable of *καλὸν* must of course be long. Thus in the opinions of these several writers accent did not speak alone of the raised note, but quite as much of length of time and loudness, or else the words *μεγας*, *μακρος*, *ευρυς* must have been used without any distinct meaning.

But to return to the pronunciation of accented Greek verse by those who insist on giving a first obedience to what the accents as now marked demand, whoever has heard a modern Greek read the Iliad, very generally confesses, that all the metre for his ear is lost. I have myself recently endeavoured to apply this law in reading the Prometheus of Aeschylus, and find that only some five and thirty senarii in the whole play can pass the ordeal without damage, as, v. 18, *τῆς ὀρθοβούλου Θέμιδος αἰπνμήτα παῖ*; v. 26, *ἀεὶ δὲ τοῦ παρόντος ἀχθηδὼν κακοῦ*. Add three consecutive lines, vv. 255–57. On the other hand at times one comes across lines in which every accent seems at variance with what

the metrical rhythm demands, as—σύ δ' ἡσύχαζε μηδ' ἄγαν λαβροσ-τόμει (v. 327), and καταβάτης κεραυνὸς ἐκπνέων φλόγα (v. 359). Add vv. 27, 32, 64, 65, 71, 81, 87, 242, 448, 480, 589, 661, 680, 710, 741, 763, 775, 783, 830, 846, 858, 932.

But more would gain a satisfactory rhythm if we might modify the prevalent laws of accent so as to obey what Choeroboscus tells us, and so falls under the censure of Hermann ('de emend. rat. Gr. Gr.' p. 77). The German professor's words are: "Denique Choeroboscus, p. 229 *b*, male adnumerat dictionibus encliticis μέν, δέ, γάρ, quas ipsa earum significatio docet non posse encliticas esse." Long before I had even heard the name of this Grammarian, I had satisfied myself that these three particles were commonly to be treated as enclitics, and indeed the fact that they are strictly denied a first place in a clause goes far to prove this; nor do I see why their meaning is a bar to the claim, for the particle γάρ, admitted on all hands to be an enclitic, carries with it a meaning no less strong than any of the three. For μέν so treated we have a good verse for modern ears, and on any other principle, what is utterly unmusical, in

προς ταυτα ῥιπτεσθώ-μεν αιθαλουσσα φλοξ (v. 992).

For δε in

στεργειν φιλανθρωπόν-δε πανεσθαι τροπον (v. 11).

ξύμφημ', ανηκουστείν-δε των πατρος λογων (v. 40).

ναρθηκοπληρωτόν-δε θηρωμαι πυρος (v. 109).

εν τῷ προμηθεισθαί-δε και τολμαν τινα (v. 381).

σιγάν-με συννοιά-δε δαπτομαι κεαρ (v. 437).

For γαρ in

τρυσεί σ' · ὁ λωφησών-γαρ ου πεφυκε πω (v. 27).

But besides these three particles I must claim the same character for αν, and this on many grounds. The Homeric particles κεν and κε are admitted to be words of precisely the same power, and indeed are by blood the same. Then again in εαν for ει αν, in όταν for ὅτε αν, in επειδαν for επειδη αν, the particle is unmistakably an enclitic. Will any one hesitate then to make the same claim for αν in βελούμ'-αν ὡς πλειστοισι πημονας τυχειν (v. 346),

δυναίτ'—αν . . . (v. 914), νοσοίμ'—αν . . . (v. 978), and ουκουν ποροίς—αν τηνδε δωρεαν εμοι, (v. 616), and so on?

Again the accents allotted on the present system to words which have an enclitic attached to them seem to the uninitiated not a little at variance with what the rhythm of a verse demands. Thus the accent on the *υ* in *ψευδωνύμως σε δαιμονες Προμηθεα* (v. 85) might, I should say, with some advantage be transferred to the *ω* of the following syllable; and a similar change would, I think, improve the melody of *σιδηρόφρων τε κα'κ πετρας εργασμενος* (v. 242).

But a word may have two enclitics attached to it, and then the due accentuation is to be found by welding the said word and its pair of enclitics into one mass. For example in the line

Καλουνσιν' αυτον γαρ σε δει Προμηθεως (v. 86)

although *αυτον γαρ* would in itself claim an accent as *αυτόν-γαρ*, yet in the quadrisyllabic *αυτον-γάρ-σε* the chief accent falls as marked. Add *Μη γάρ σε θρηνος*, etc. (v. 388), *Μη τοί με κρυψης* etc. (v. 625), *Η γάρ ποτ' εστιν* etc. (v. 757).

Similarly the combination *εί-μεν* by the addition of *γαρ* has its accent altered to *ει μέν γαρ*, in

Ει μέν γαρ εν πραξαίμεν, αιτιά θεων (Sept. c. Th. 4).

Ει μέν γαρ υμιν μή τοδ' εκπραξώ χρεος (Suppl. 472).

But here I am running altogether counter to the teaching of Herodotus^{Ἡρόδοτος}, etc. and to the authority of modern scholars. Hermann for example, in his 'de emendanda ratione Gr. Gr.' in his first chapter on accents, (p. 61) says: "in hoc genere illud in primis meminisse oportet, summi faciendam esse grammaticorum auctoritatem," and goes on to ask, if their testimony be despised, "quo tandem confugiemus?" My answer is that these grammarians have no claim to be called witnesses to the pronunciation of Classical Greek; and for one I prefer to take the evidence of the original poets as shown in their verses.

From all these considerations I am driven to the conclusion, that the accentual marks as now printed in our editions of Greek writers are altogether an anachronism. Well suited probably they were to define the pronunciation of modern Greek in the

twelfth century; but in Homer, in the tragedians, in Thucydides, etc. they simply mislead. To say that they often serve to distinguish words of otherwise like form, is an argument, sanctioned indeed by Porson, but as Mr. Pennington candidly observes (p. 102): "As to the use of them in distinguishing words which are written alike, these are few; and there can be no need to encumber with marks all the rest of the book; nay the very fact of our observing a mark upon those words alone, which require it, would better direct our minds towards their true meaning in those very few passages, where it does not necessarily result from the context."

But there is a fashion in these things. It looks more "scholar-like" to accentuate one's Greek, is sometimes said, and perhaps oftener felt. Still there have been independent scholars, who have had the courage to print Greek unaccented, as Kidd in his edition of Dawes' *'Miscellanea Critica,'* Fox Talbot in his *'Hermes,'* Rann Kennedy in his translation of some of the speeches of Demosthenes, Rose in his edition of Vitruvius. On the other hand the authorities of Cambridge are bound, it is said, by the will of the Founder to insist on the candidates for the Porson Prize sending in their verses duly accented; and if the rhythm of the verse is improved by a due distribution of accents, they of course are right. But is this so? Does any one of the competitors ever think about the accents before the verses are completed? Nay, does it not at times happen, that one does the composition, and then gets a friend better versed in the abstruse doctrines to supply the required marks? If this be true, it would be just as well to season the dish as it were from a pepper-box, provided only that the peppering were not too thick.

CHAPTER XXXIII.

ACCENT—IN LATIN.

BUT the sphere of Latin accentuation is shrouded by a mist almost as thick as that which we have been considering; and that from a similar cause. The grammarians on whose authority the received dogmas rest lived at a period when the classical language was in a great measure dead, for these writers belong to the third, fourth, fifth, and sixth centuries. Terentianus Maurus is said in some books to have flourished about A.D. 100; but his ablest editor, Lachmann, places him about the end of the third century (praef. p. xii). Thus they also are no way entitled to the honourable name of witnesses, but like ourselves founded what they said on the evidence of the writings which had been handed down to them, or else merely repeated what some preceding grammarian had already written. The grammarian Pompeius for example (205, 7 K), speaking of the accent of the noun *cuius* says: *invenimus apud plerosque artigraphos . . .*; and soon after in reference to some disputed point occur the words: ‘*et illud lectum est et illud.*’ Priscian too (Partit. 463, 28) writes: *Quidam stulte et contra usum auctorum participii paenultimam producunt*; and again (464, 10): *auctorum usus nobis magis sunt observandi*. Note too the past tense in: *femininum enim (pleráque), quamvis paenultima brevis sit, accentum tamen in ea habuit acutum* (Prisc. 1, 181, 19 K); and again (2, 484, 34), *paenultimum habuerunt acutum*.

Yet already in the time of Hadrian the pronunciation had for many altered to such an extent that vowels short in classical

times were often accented, as in the trochaic verses of Florus, as given in the life of the Emperor by Aelius Spartianus (c. 16).

*Ego nolo Caesar esse
Ambulare per Britannos
Scythicas pati pruinas;*

With the Emperor's answer :

*Ego nolo Florus esse
Ambulare per tabernas
Latitare per popinas;*

And again in the soldiers' dance-song aimed at Aurelian (Vopisc. c. 6), as corrected partly by Buecheler, partly by Corsen,

*Vnus homo mille mille mille decollauimus.
Mille mille mille mille bibat qui mille occidit.
Tantum uini nemo habet quantum fudit sanguinis.*

Indeed it is the general habit of the grammarians to sanction their statements by a reference to Vergil and other old writers, whom they very properly term 'Veteres.'

But there are other reasons for attaching no great weight to their assertions. In the first place the ablest, the most highly educated writers alike of Greece and Rome exhibit a strange inability to deal with the facts of linguistic science. The Cratylus of Plato, for example, is so full of gross absurdities, that some of the best scholars look upon the treatise as a squib aimed at the doings of some sophists in the field of philology (see Professor Jowett's 'Introduction to the Parmenides,' p. 238); yet I cannot but hold the more legitimate view to be, that the wild etymologies which constitute the bulk of the dialogue are given in all gravity, for they are mixed up with occasional glimpses of genuine philosophy. A similar want of thought, or of common sense, characterises the proceedings of the most educated Romans in the best ages of Latin literature. Thus Cicero in the compass of a few pages tells us that the *g* of *ignoti* and *ignauī* is inserted to soften the sound—'dulcius quam ut ueritas postulabat'—as though he did not know the old forms *gnosco* and *gnascor*, to say nothing of *γγνωσκω* and *γεννω*, *cognosco* and *agnosco*; that *rettulit* owes its first *t* to the same cause as *reddidit* its first *d*, whereas

it is of course a compression from a reduplicated perfect *re-tetulit*; and again he would deduce the simpler *ala mala* from their diminutives *avilla* and *maxilla*, thus simply reversing the stream of derivation. He seems also to look upon *nequeo* (§ 154) and *nescio* (§ 157) as softened forms of *non queo* and *non scio*, not knowing, it would appear, that *ne* is the more primitive adverb, which constitutes but one element in *non* (*ne-unum*; cf. G. *nein* for *ne-ein*). Cicero's friend Varro is the less to be excused, because he was professedly a student of linguistics, and at the same time a man of learning. Yet he gives, as etymologies, *ager* ab *agendo*, *colles* a *colendo*, *fundus* quod *fundit* quotquot annis multa, *uitis* a *uino*, id est a *ui*, ab *spe* *spica*, *prata* ab eo quod sine opera *parata*; and all this, not gleaned from different parts of his 'De lingua latina,' but comprised within a single section of his first existing book (c. 5, § 4). Aelius again had probably a higher reputation with his countrymen in this line than any other author, yet Quintilian quotes from him the derivation—'*pituitam*, quia *petat uitam*'; and Varro himself (l. l. 5, 20, p. 103) sanctions an etymon of Aelius equally reasonable: '*Volpes*, ut Aelius dicebat, quod *uolat pedibus*.'

From these I descend by whole centuries to the grammarians from whom it will be enough to quote the following. Probus (col. 1470 P; p. 26, l. 17 K): 'ab eo dictae *apes* quod *sine pedibus* nascuntur, sicut Vergilius de his 'trunca pedum.' Diomedes (275, 20 P; 300, 20 K): '*oratio* uidetur dicta quasi *oris ratio*, uel Graeca origine *απο του οαριζεν*, hoc est sermocinari.' The same (323 P; 334 K) has: 'uerbum dictum est ab eo quod *uerberato* lingua intra palatum aere omnis oratio promatur'; (415 P; 421, 26 K) '*littera* dicta quasi *legitera*, quia *legitur*, uel quod *legentibus iter* ostendit, uel a *litura* quam patitur, uel quod *legendo iteratur*;' and Priscian (539 P; 6, 12 K) has much the same. Few will prefer any of these views to the doctrine that *littera* or *litera* stands for *lictera*, just as *lima* 'a file' does for *likma*, both coming from a lost verb = S. *likh* 'scratch, write.' Lastly Cledonius (32, 5 K), speaking of three synonyms for the notion 'accent,' viz. *toni tenores accentus*, derives the first of these a *sono*, the last ab *acuendo*.

For the consideration of the doctrine of accents a first qualification is to be conversant with the facts of prosody. Now one of these grammarians, Cledonius (78, 5), points to the use of *omitto* with a short initial vowel as a special licence of Horace's: 'hoc metri gratia praesumpsit.' Priscian (?) de accentibus (1293 P; 524, 15 K) gives for his first example of a noun in *es* short, *Hercules*; and his next instance is *sonipes*. Victorinus in his treatise 'de carmine heroico' (1956, 18 P) defines a 'palimbacchius' as consisting 'ex duabus longis et breui,' and then gives as his only examples *lucerna*, *lacuna*. Again he classes *facinora* (1957, 8) as a paeon secundus with *colonia*. The same author (1970, 20) gives us the general rule: 'nomina gen. fem. quae in *es* syllabam finiuntur, si eadem ipsa syllaba in genitio non producitur . . . breuia sunt'; and then, quoting as his example *haec lues*, adds: 'ea syllaba brevis est.' Elsewhere (1966, 1) he lays down the very convenient rule, that a short final may be lengthened 'si ita poeta uoluerit.' Martianus Capella again (book 3, 65 G., p. 70, Eyss.): (nominatiuus) *es* terminatus in Graecis nominibus brevis est, ut *Anchises*. Maximus Victorinus again (p. 1972 P), after speaking of verbs which exhibit a short vowel in the imperfect tenses, as *lāuo mōueo*, but have a long vowel in the perfect, *lāui mōui*, adds that there are others, which have the same quantity throughout, as *uoco doleo* with a short initial vowel, *numero (!) soleo (!) munio* with a long one.

Then as to metrical knowledge, what are we to think of Priscian's fitness to estimate the metres of Terence, when coming across some lines of the *Andria* in the Bacchiac metre (3, 2) he takes it for a jumble of iambs and trochees, 'confusio rhythmorum,' specially selected by the poet as agreeing with the ignorance of the speaker? (1326 P; 2, 425, 15 K).

Quintilian belongs to a different category from the grammarians; yet how deficient in taste must he have been, when he speaks of the 'Terenti scripta' (10, 1, 99) as 'plus adhuc habitura gratiae, si intra uersus trimetros stetisset.' It is enough to oppose to such criticism the one scene in the *Andria* where a burst of vehement 'octonarii' from Pamphilus is suddenly

checked by the words of Mysis, 'tū autem hoc timet ne deseras se'; on which there follow some thirty 'senarii,' calm indeed, yet full of the deepest feeling; and at last Pamphilus having cleared his swollen bosom, the relief of his feelings rings in the change of metre to 'septenarii,' so resonant of happiness.

Again undue weight has been attached to the statements of the grammarians, under the feeling, that their evidence runs the same way, that they confirm one another. But this fact is really a reason for distrusting them, as they copy one another in the most servile manner, thereby showing that independent knowledge or thought is a thing unknown to them. Thus the examples of accentuation in Donatus (371, 9 K) are: *fāx nīx nūx* — *rēs dōs spēs* — *mēta Crēta* — *nēpos lēges* — *bōnus mālus* — *Tūllius Hostilius* — *Catūllus Metēllus* — *latēbrae tenēbrae* — *Cethēgus perōsus* — *Athēnae Mycēnae*. Now these are all given as examples in the 'De Accentibus' ascribed to Priscian. He adds indeed a few other examples, among them by a blunder prefixing *pax* to *fāx* as having an acute accent, as though the oblique cases of *pax* had a short *a*, which his own rule would require. But the blunder once established is as usual copied by others. Victorinus for example (1942, 43 P). For further evidence of this sequacity see L. Müller, 'de re metrica,' pp. 16, 17.

With these warnings then that the ground is slippery, we may venture with less risk into the field where the laws of Latin accent are laid down. There is a passage in Priscian (538 P; 1, 6, 19 K) which at first view seems to promise a philosophical treatment of the subject, and has been accepted as such by two modern writers — "Vox . . . tripartito diuiditur . . . in altitudinem, latitudinem, longitudinem." The late Professor Ramsay in his *Latin Prosody* (p. 270) referring to a repetition of this doctrine in the treatise 'De accentibus' ascribed to the same author (1286 P; 2, 519 K), gives his interpretation of it thus: "Quantity will represent length, emphasis breadth, accent height or depth." The same or nearly the same in substance is the view taken of this passage by Mr. Clark ('Camb. Journ. of Phil.' p. 105). But I fear they have assigned to the grammarian a more sensible theory than he himself intended; for in the first

passage Priscian means nothing more than that the voice being a 'corpus' must have three dimensions in space. It is true he goes on to say: *praeterea tamen singulae syllabae altitudinem habent in tenore, crassitudinem uero uel latitudinem in spiritu, longitudinem in tempore.* Here *latitudo in spiritu* has a very different meaning from that attributed to the words by the two English scholars, as may be seen by reading a few words that follow, where it turns out, that by *spiritu* is meant simply 'aspiration.' Priscian's examples distinctly prove this, for after telling us that there are ten varieties of the vowel *a*, which depend, 1. on quantity, 2. on accent whether *acnte* grave or circumflex, 3. on aspiration or non-aspiration, he adds as his instances: *ábeo hábeo — àbimus hàbemus — hámis hàmorum hâmus—árae àrarum âra.*

Instead of relying then on Priscian as a safe expounder of the principles of Latin accent, I for one am more inclined to trust the oldest of the Latin grammarians, Donatus, when he says (426, 16 K): '*accentus in ea syllaba est, quae plus sonat;*' and here I have no objection to the view that stress may well involve all the three qualities which the two English writers speak of, 'note loudness and length of time.' We may also all subscribe to a doctrine, which is as true for English as for Greek and Latin, laid down by Diomedes (425 P; 430, 30 K): '*ut nulla uox sine uocali est, ita sine accentu nulla est,*' a sentence repeated in almost the same words by Martianus Capella (book 3; p. 60 G., p. 65, Eyss.). Yet even here there is a difficulty, for I cannot allow an editor or printer to decide this point by leaving a little white space before and after what he may be pleased to call a word. In the sentence just written I venture to affirm that 'to call,' though for the eye as here written it seems to be two words, is for the ear like 'uocare' but one. But this is a matter which will come before us again.

I have now given my reasons for setting less value on the authority of the grammarians on the several grounds that they were dealing with a dead language, and so have no pretensions to the authority of living witnesses; secondly, that their knowledge of the classical language was really very imperfect, espe-

cially on the side of prosody; thirdly, that they were sadly wanting in common sense; and fourthly, that their very agreement with each other gives little weight to their statements, as they for the most part simply repeat by rote what others said before them; and this is only a fitting preparation for duly considering what they have to say.

Perhaps the most distinct statement on the subject of accents is what Diomedes says under the heading 'de accentibus' (p. 430 K). Here we are told 1. that significant monosyllables have an acute accent, if the vowel be in itself short as *ab*, or only long by position as *ars*, but a circumflex if the vowel be by nature long, as *spes*, *lux*, **mons**; 2. 'omnis uox disyllaba priorem syllabam aut acuit aut flectit,' where I give the very words, because it is here that my chief battle is to be fought. The circumflex is of course limited to the case of a syllable long by nature and followed by a short syllable, as *lūna*; to which I make no objection. His other examples are *dēus*, *cōhors*, *pōntus*, *sōllers*, etc. As regards the last pair I again assent. Then for words of more than two syllables the accent depends chiefly on the length of the penult; if this syllable be long it has the accent, viz. a circumflex, if the vowel be long by nature and followed by a short syllable, as *marīnus*, *lectīca*, otherwise an acute, as *Metēllus*, *Fidēnae*, with the familiar exception of the shifting accent in such a word as *latebra*. Lastly he says: 'sin autem (in trisyllabis) media et nouissima breues fuerint, prima seruat acutum tenorem, ut *āscia*, *Iūlius*. It is probably by an oversight that he introduced the idea *nouissima*, for no doubt the same accent would be given to *asciae*, *Iulii*. A graver omission in my view is that he fails to include among his examples such forms as *anima*, *genua*, *similia*, *dissimilia*, *tribuere*, *contribuere*, *mulieris*, *introierit*, words I mean which contain a short penult

* These words were probably pronounced *lux* as E. *loose* or *lose*, *mons* so as to rhyme with E. *rose*. How readily a Latin *x* passed into a mere sibilant has been seen in p. 70; and in Lucretius (2, 163) editors might I think safely have retained *multiplēsq̄ue* of the MSS., seeing that the combination *xq̄* if fully pronounced was naturally offensive, as shown by the form *sexcenti* in place of *sex-centi*.

and short antepenult. But these I suppose would by him have been accented on the antepenult. As to *anima* his words cover the case; and the same is implied in what he had said a few words before: 'in trisyllabis et tetrasyllabis et deinceps.' As regards *anima* and *genua* I assent to his doctrine, but with a slight qualification. In the first place I hold that an accent of a Latin word can only fall on a long syllable; but this limitation seems at first view to be an impossibility for the words in question, inasmuch as all the syllables are short or thought to be short. But the difficulty is far from insuperable. A tribrach like *anima*, I claim to pronounce as *an'ma*, which is not far removed from the Ital. *alma* or the Fr. *âme*. *Genua* again serves as an actual trochee in Vergil, *tenue* in Lucretius; and here I may appeal to the authority of the grammarians themselves, who often identify the tribrach with the trochee. Thus Diomedes (479, 1 K) says: 'tribrachys tribrenis . . . quem plerique chorium nuncupant'; and in 'Juliani Excerpta' (323, 2 K): 'tribrachus qui et choreus.' So Cledonius (30, 23 K) tribrachys: hic etiam chorius dicitur. But this word *choreus* in Cicero and Quintilian is a synonym for 'trochee.' Lastly, Terentianus Maurus (1445, ed. Lachm.) has:

Nám solet longám trochaeus sóluere in duás breves,
 Vnde et appellánt trochaeum quém vocamus tribrachyn.

Then as regards the longer of the forms just quoted, already Bentley had gathered from the metres of Plautus and Terence, what he says ad Eun. 2, 3, 36: 'semper accentu in prima, *múlieris*, *múlierem*,' referring at the same time to And. 1, 1, 90 and 106. So again ad Hant. 2, 3, 30: 'quadrisyllaba ista breuia plerumque apud antiquos primam acunt, *Múlieres*, *Própemodum*, *Périerim*, *Ínopiam*, *Ítinera*;' and again for the last of these he appeals to Pl. Trin. 4, 2, 40; Capt. 4, 2, 14; Cas. prol. 66. Hermann ('de metris,' p. 64) holds the same doctrine, giving as examples, *míseriam*, *fámiliam*, *tétigeris*, *rédiro*.* But it will be

* *Mediocris* may be thought to be an exception to this rule by those who hold the *o* to be short, but this is not the case. As the adj. *medioc-* in my view grew out of an older *medioc*, it had a sup. *medioc-simus*, which written *medioximus* occurs twice in the Cistellaria, while Varro

said that this accentuation is at variance with the doctrine of the grammarians that the accent cannot fall on any syllable preceding the antepenult; and I answer that the difficulty is at once set aside by the pronunciation *mís'riam*, *fán'liam*, *tél'geris*, *ré'tyero*; and here again my view is supported by the habit of dactylic metres, as in the case of *abiete* (*ábyete*), *ariete* (*áryete*), *strigilibus* (*stríg'libus*, or rather *strí'libus*),* *tennia* (*téawia*); and again in the Corp. Inscr. (542, 4) we have an hexameter verse ending: *ut facilia faxseis*. Similarly Horace has *consilium* and *principium*, as trisyllabic words, *consilyum* and *princípyum*. Akin to this is '*Flouíó-rum* rex Eridanus' of Vergil, where *flouio* does duty for a spondee, as also *Stelio et* (= *stelyet*) in another passage, for the MSS. write this word with a single liquid; and Bentley (ad Eun. 4, 4, 22) would have done better to write: *colore stelionino*; but no change was necessary. The idea that these words require a double *l* grows out of a wrong inference from the form of *stella*, which represents a theoretic *ster-el-a*, a dim. of a lost *stera* (cf. *αστερ*, E. *star*), while *stel-io* is another dim. of the same, the *r* passing, as it so often does, into an *l*; and indeed the *r* is preserved in *septen-triones*, where *triones*, 'little stars,' is corrupted from *ster-iones*, the *s* lost, just as in S. *tara* 'star.'

The rule then which I assert for those words which have two or more consecutive short syllables* (exclusive of the last) is this, that the second of such short syllables is either dropt, or, if the syllable consist of a mere *i* (*e*) or *u* followed by a vowel, then this *i* or *e* becomes an *i-consonans*, the *u* a *u-consonans*. Such suppression of a short vowel is seen in *stíltus* = *stolidus*, *uémens* = *uchemens*, *uálde* = *ualide*, *cáldus* = *calidus*, *cáldior* = *calidior*; also the reduplicate perfects *repperi*, *reppuli*, *reccidi*, *rettuli*, *rettudi*, for *re-peperi*, etc., and *poplicus* or *publicus* for

(ap. No. 141, 3) speaks of an adv. *mediórumo*, 'ut quondam patres nostri loquebantur.' For the quantity of the *o* see Pl. Bac. 3, 3, 23; Merc. 2, 1, 13; Cure. 5, 1; Ter. Andr. 1, 1, 32; Hant. 2, 3, 45; Ad. 5, 99—where Ritschl, Fleckeisen, and Umpfenbach need not have written *mediócris* with the accent over the *i*. Add *mediócritatem* of Hor. Od. 2, 10, 5. Had the *o* been short the metrical value of the word would have been that of a dactyl, *médtyocris*.

* Cf. Fr. *étrille*, and see the remarks on *uigilis* in p. 139.

populicus. *Beneficium* with its four consecutive short vowels requires two doses of the remedy. First the *i* before the *f* vanishes, bringing us to *ben'ficium*, then the second *i* becomes a *y*, and we arrive at *ben'ficyum*, leaving the accent on the retained *i*, and such is always what the metre requires, as in :

Vt beneficium béne merenti nóstro merito múneres,
Capt. 5, 1, 15.

This I think most scholars will prefer to Hermann's *bneficium* (p. 133). Again for metre *ālītibus*, *dēripēre*, sound as *alīt'bus*, *deríp're*, while *Canidia* and *Iónius* by the fact of their accentuation on the syllables, as here marked, bear evidence that the *a* of *Canidia* and *I* of *Ionius* were long. I take these examples from the Epodes of Horace,* where there is no difficulty about the metre; but the same law furnishes the leading clue to all the metres of Roman comedy; and therefore I would impress upon all those who wish to correct our barbarous pronunciation of the Latin language to insist on the observance of this law, which is not merely essential for the right understanding of metres, but has at the same time the practical advantage of fixing the quantity of the preceding syllable in the memory of the student; and this surely is of more importance than the correct pronunciation of a *c* or *g*, seeing that it effects the whole character of rhythm, which in those pettier discussions as to the pronunciation of this or that consonant is no way concerned. I was once asked by an old Etonian, an ex-fellow of King's College, Cambridge, what the quantity of the *i* in *mulieris* was? Of course his ear had been misled by the old pronunciation of the word, which happens not to occur in the poets commonly

* Some months after this was written I received the number of the 'Hermes' (ächter Band, erstes Heft) in which A. Eberhard writes (p. 125): "Es ist ein in dieser Form, so viel mir bekannt, noch nicht ausgesprochenes, aber von Horaz ausnahmslos beobachtetes Gesetz, im iambischen Masse den Trybrachys nur so zu verwenden, dass die Ictus-silbe, die erste eines mehrsilbigen Wortes bildet." Yet already in 1846 my Latin grammar (§§ 24, 25) laid down the principle in its broad generality, and no way limited to the epodes of Horace, or to iambic metres, but applicable to all Latin poetry and even prose without exception.

read at Eton. But anyone who speaks of it as *múl-geris* knows that alike the *u* the *i* and the *e* are all short. Another point gained is that we begin to see that the same laws which govern accentuation in comic verse, also govern it in the dactylic metres of Vergil, etc., the lyrics and epodes of Horace, and the hendecasyllabics of Catullus, etc., thus removing in some measure the mist that hangs over the subject. But again in the Greek tragedians the same abbreviations supply the best guide, so far at least as the iambic and trochaic metres are concerned; and here also I am stating, what has long been felt, though not distinctly enunciated by others. Hermann, for example, calls attention in the *Philoctetes* (v. 1307) to the very unusual ‘ictus’ on the word *πολέμιος* as there seen, which everywhere else, *i. e.* in twenty-six passages, requires to be read as *πόλμιος*. But it may be asked why the second of the short syllables should be specially selected for such degradation; and the answer is a simple one. For the very reason that the first of the two vowels is short, the following consonant goes with it to constitute a syllable, and then the next short vowel is left as it were unprotected; and thus in the case of words like *ten-uia*, *red-iero*, the *u* and *i* commencing a syllable and at the same time followed by a vowel, take the sound of the *u* and *i* consonantes, *i. e.* what we write *w* and *y*. On the other hand *biduum* and *filius* having a long *i* in their initial syllables leave the *d* and *l* for the syllable which follows, and so of necessity remain trisyllabic.

On this law as affecting consecutive short syllables I place the more stress, as I believe it to be the best guide to a due perception of ancient metres, especially those of the iambic or trochaic kind, and this alike for Greek and Latin. To test the matter in the former language I read the *Prometheus* and *Seven against Thebes* a few years ago, in a small edition of *Aeschylus* by Dindorf, 1827, marking every case of two or more consecutive short vowels in the *senarii*. I then tabulated these according to the place in the verse occupied by the first of such short vowels. The result was that the instances in the two plays taken together, in all about 145, were thus distributed: in the 1st place 22; in the 2nd 5; in the 3rd none; in the

4th 2 (χαλυβες, Pr. 715; αλοκα, Seven ag. Theb. ⁵⁹³ 4022); in the 5th none; in the 6th 62 (including τον-εμον, , ibid. 1029); in the 7th 1 (τυμβοχοα, ibid., 1022) of which more presently; in the 8th 10⁶; in the 9th 1 (αφνιδιος, Pr. 680); in the 10th 1 (περιβαλειν, Pr. 52). Thus in the 2nd, 4th, 6th, 8th and 10th places, as might be expected, we find the great majority of instances, viz. 80.⁸⁶ Of these the instances belonging to the 2nd place fall into two divisions, Κιμμερ(ι)κον, Pr. 730, Αρτεμ(ι)δος, Seven, 450, ω θεομανης, 635, so as to commence with a spondee duly accented on the second syllable, and Ἰππομεδοντος, 488, Παρθενοπαιος, 547, which I gladly accept as clear instances of an initial trochee (s. p. 467). Again those of the 8th place divide themselves into two classes, viz. 10 such as διατορους πεδας, Pr. 76, and 10 such as Πολυφοντου βια, in which the disyllabic word in my opinion should be attached as a quasi-enclitic to that which precedes it, Πολ-’φοντόν-βια. Thus in all these cases, if we do not count the initial trochees, the asserted vowel-law is obeyed, and in the great majority a tribrach to the eye serving as a virtual trochee. Then as to the odd places it will be seen that the first monopolizes nearly all the cases. But here again a division presents itself. In ἑκατο-καρήνον, Pr. 353, ἀφετον αλᾶσθαι, 661, ἐπαναδιπλάζε, 817, Ἑτεοκλῆς αν, Seven, 6, and πέδιονομοῖς τε, Pr. 254, I hear an initial trochee, as in Ἰππομεδοντος. In the other cases we have an anapest, as αδαμαντινων, Pr. 6, ποταμοι, 368; but such anapest under the assumed compression becomes a spondee, accented in some cases on the first syllable so as to approach to a trochee, in others on the second, and then all but an iamb. There remain but αφνιδιός-μορος, Pr. 680, which corresponds to the *laqueó-gruem* of Horace; and τυμβοχοα χειρωματα, Seven, 1022; but here we may well write, or at any rate read, τυμβοχᾶ χ., following the analogy of ἀπλᾶ and διπλᾶ for ἄπλοα, διπλοα. Similarly dactyls in the 3rd place as ἐξυπτιαζων ονομα, Seven, 577, and anapests in the 5th place as Αμφιαρεω βιαν, 569, cease to be such. In short with the exception of the assumed trochee in the first foot, as an occasional, not unpleasing variety, the iambic rhythm so completely prevails, that iambs in the even feet, and either iambs or iambic spondees so to say in the odd

feet alone occur, to the exclusion of all tribrachs, dactyls, anapests and spondees of the other type. So far I have spoken of the *senarii* alone, but the law holds with all strictness for all iambic and trochaic metres of the Greek tragedians, as also for the same metres in Plautus and Terence. I would therefore urge that this vowel-law should be enforced in the pronunciation of Greek and Latin prose, for so trained, a student would by his own ear get a good notion of a metre, although he might not be able to define it in technical language; and at the same time he would perceive that the rhythm of classical poetry was founded on the same principles which govern modern verse.

In these latter remarks I have run away from the subject matter as defined in the heading of the chapter, where Greek is not mentioned, but the digression will be regarded as naturally growing out of the close connection of the ideas.

CHAPTER XXXIV.

ACCENT IN LATIN,—*Continued.*

I PASS next to a far more intricate problem, the accentuation of disyllabic words with a short penult, *i. e.* to pyrrhic and iambic words, as *mālŭs*, *mālī*. Here many of our modern writers on Latin accentuation cut the matter short by putting forward the simple rule that words of this form had always an acute accent on the penult, having been led to this conclusion by a careless reading of what the Latin grammarians lay down. It is true that Diomedes (see above, p. 447) makes this general assertion, and that Donatus (371, 11 K) speaks as absolutely. So too Cledonius (32, 12); while Pompeius implies the same when he writes (128, 9): *apud Latinos ultima syllaba accentum non habet*. But if we read a few pages on in the treatise of Diomedes we come upon some important qualifications of his rule in the words (433, 35): *Accentuum legem uel distinguendi, uel pronuntiandi ratio, uel discernendae ambiguitatis necessitas saepe conturbat*. So again Pompeius (130, 28) has: *diximus regulas accentuum; uideamus quae sunt res quae corrumpunt regulas. Tres sunt tantum, distinctio, discretio, pronuntiatio*. The examples^{by discretio} adduced by Diomedes himself (434, 12 K) are *pārens* and *pārens*, *lābor* and *lābor*, *lāte* and *lāte*; and in proof he quotes from Vergil: *iamque ibat dicto parens* as against *alma parens*; *tot adire labores* as against *adlabitur aures*; *hinc populum late regem*, and *ut superi uoluere late* (of Lucan); with the final comment: *omnia autem huius modi facilius ex metrica structura comprehenduntur*; and I ask for no better proof that accentuation was for Diomedes what it is for us. So too Priscian (1, 372, 15 K) has: *accentus ponē (= post) ergó (= causa) dif-*

ferentiae causa in fine ponitur, whereas the vb. *pōne* and the adv. *érgo* have the accent on the first syllable. Elsewhere (2, 47, 6) he adds *síne* the verb, and *siné* the prep.

But if this principle of distinguishing homonyms be once admitted, we have a considerable latitude for exceptions from the general law. Thus the following sixty words or so, themselves iambs, are identical for the eye with existing spondaic words, as verbs: *cano, colo, dico, lego, leuo, lino, noto, sero, sino, uoto, aras, cdes, humes, manes, mores, pares, places, sedes, soles, uires, uoces, uelis, uenis, ueni, nitens*; secondly sb. *canes, caro, comis, duces, fides, freti, hamis, iugi, labi* (g. of *labium*), *libris, odi* (g. of *odium*), *oui, pedes, plaga, plani, Remo, seni, solo, sudes, uades, uiro, uiti* (g. of *uitium*); adj.: *cavi, leues, mala, malae, malam, malas, mali, malis, malo, malos, malus, noui, uagis*; conj. *uti*. Thus I am entitled to read: *Arma uirúmque canó* in the *Aeneid*; *Vt cum prima nouí* in the *Georgics*; *Iam Fidés et Pax et Honos Púdorque* in *Horace*.

Again words which originally had a fuller form with a long and therefore accented penult retained the accent in the same syllable when by contraction or "apocope" it had become a final, says Priscian (128, 23), his examples being *primás, optimás, Larínás*, as representing older forms, *primátis*, etc. Other examples given by him: *prodúc, illic, istic, audit, cupít, fumát*, as cut down from *prodúce, illice, istice, audiuit, cupíuit, fumáuit*. And these exceptions are also admitted by several others of these writers. Let me note too that Priscian in support of this accentuation of *illic* quotes "*illic est huic rei caput*" (*Ter. Andr.* 2, 6, 27), thus again confirming the inference I but now drew from the words of *Diomedes*.

But this principle once admitted, I claim a similar accent for the adjj. *ferax, uorax, edax*,* *ferox*, for the sb. *palus* (and perhaps *salus*), and above all for the numerous family of imperfect participles, as *ferens, gerens, amans*, seeing that these also were at first trisyllabic words with a circumflex on the penult, *feracis*,

* This is consistent with the metre of the *Pers.* 3, 3, 6 and 16:

Procáx, rapáx, trabáx : trecentis uérsibus . . .

Perénniserue, lúreo edáx, turáx, fugáx.

etc., *paludis*, *ferentis*,* etc., as shown in the pl. gen. *feracium*, *paludium*, *ferentium*, and the neuters *feracia*, *ferentia*. Similarly comparative grammar assures us that *amas*, *amat*, *amant*, superseded fuller forms *amāsi*, *amāti*, *amānti*. Nor is this assumption very violent, when, as we have seen, a Sard dialect of the present day has *sunti*, *uolinti*, *currinti*, for *sunt*, *uolunt*, *currunt*. Hence in the 12th book of the Aeneid I have no hesitation in so accentuating *Hasta uoláus ut forte* (v. 270), *ista repéns discordia* (313), *Bella mouéns immittit* (333), *Hesperiam metire iacéns* (360), *stabat acerba freméns* (398), *cuncta geréns uocemque* (472), *pabula parua legéns nidi-que* . . . (475), i.e. seven examples in little more than 200 lines. Again we must throw the accent on the finals of the adverbs in the following lines from Terence and Vergil :

Intérea mulier quáedam ablíne triénnum—

Per si quá 'st quae réstat adhúc mortálibus úsqum—

Ságuine adhúc campíque ingyéntes óssibus álbent.

What is meant by the *distinguendi ratio* of Diomedes and the *distinctio* of Pompeius it is difficult to see. The one example of the latter grammarian is *intereáloci* and *interea loci* as distinguished by accent; but this seems not a happy expression. In grammatical language *distinguere* is used of the break between words or sentences, where our word is a 'stop'; but in the present example 'coniunctio' would have been a more suitable term, for it is by the union of *intérea* (= *intérya*) with *loci* that the compound *intereá-loci* obtains its new accent on the *a*. Again the example given by the same grammarian of the exception which he denotes by *pronuntiatio*, is *uiridique* in the line: *uiridique in littore conspicitur sus*; but the accent of *uiridique* as opposed to *uриди* is another instance of the same change due to 'coniunctio uerborum.'

As to the exception which Diomedes denotes by the words *pronuntiandi ratio*, after some thought my interpretation is, that it was simply a loophole for the cases where his leading rules were violated, so that a more straightforward course would

* See too p. 116.

have been to say: Such was the accentuation of Latin words—except where it was otherwise.

But to return to the case of ‘*distinctio*,’ I have already said that ‘*coniunctio uerborum*’ would more fitly have expressed the idea; and here I find that I am using the very language of Quintilian (1, 5, 27). Speaking of the accentuation of the prep. *circum* as at times differing in accent from the sb. *circum*, as in: *circum littora*, *circum Piscosos scopulos* (Aen. 4, 254), he says that some grammarians accounted for the final acute on the prep. ‘*propter uocum discrimina*,’ but he adds: *Mihi uidetur condicionem mutare quod his locis uerba coniungimus*; and soon after he adds: *idem accidit in illo: Troiæ qui primus ab oris*, where I give the accent as marked in Halm’s edition. On the variation of accent as due to the union of words I shall have to speak at length; and for that reason prefer to direct attention to some matters which claim indeed rather a long discussion, but one far shorter than the matter here before us.

Hermann in his work ‘*de metris*’ has some remarks on accent and quantity which deserve attention, though perhaps not expressed with all the accuracy one might desire. In p. 58 he says: *uel brevis syllaba habens accentum producebatur, uel longa quam aut præcederet accentus aut sequeretur, corripiebatur*. Again p. 60: *Praeter accentum etiam vocis intensio aliquam in constituenda syllabarum mensura vim habet*; and soon after: *Hinc factum est ut in initio sententiae vocis intensio cum metri prima arsi conjuncta brevem syllabam recte producere visa sit*; and one of the examples he quotes is *φίλε καρίγηνη* (Il. δ. 155; ε. 359). By the phrase ‘*vocis intensio*’ he meant no doubt ‘*emphasis*.’ The examples in the Greek language are *Ἀρες Ἀρες* of Homer, and *τα μὴ καλά καλά πεφανται* of Theocritus. But the old Latin drama supplies us with a rich crop, especially in the possessive pronouns. When these are emphatic, and so for the most part precede their nouns, they have often a long penult* in defiance of the prosody of later

* At times indeed they are treated as monosyllables, but still this monosyllable has the accent, as *tu* (pron. perhaps *two* or else *to*) in the 40th example in the series about to be given.

writers; and this long quantity after all is in accordance with the old Greek genitives, *εμεο, σοιο, εοιο*, and the argument is the more forcible, as the possessive pronouns are only genitives forced into declension as adjectives, the process being well seen, as I have said, in *cuius -a -um*. I was at one time led to believe that within the limits of the Latin language the original length of the first syllable of *suus* was established by the authority of old inscriptions; as for example in Mommsen's *Corpus, soueis* (198, 50; 1258); *souom*, gen. pl. (588); *suuo* (1242). But I was here checked on finding the senarius: 'suóm mareitum córde dilexít souo' in the same work (1007). The form *nōuos* again shows the danger of such an argument. However I produce the following examples, beginning with trochaic octonarii cat. For references see below.*

1. Mágis nunc mēum offícium facere, si huíc eam aduorsum, árbítror.

2. Quid si adduco túom cognatum húc ab nauí Náucratem.

3. Ámphitruo píam ét pudícam túam esse uxorem út scías.

4. Nón metuo quin méae uxori látae suppetiáe sient.

5. Díe amabo an fóetet anima uxóris túae? Náuteam.

6. Quís simulauit méi honoris mittere huc causá coquos.

7. Ét te utár iníquiore méus me ordo inrídeat.

8. Ét ille adueniens túam me esse amícam suspicábitur.

9. Túa infamiá fecisti géruífigulos flágití.

10. Phílocrates per túum te geníum óbsecro exí, té uolo.

11. Iámne mortuós sum? Ostende: méast. Mala crux éa quídemst.

12. Néce quíbus modís me mēae uxóri purigém scío.

13. Túi amoris cáussa ego istuc féci. Immo ecastór píus.

14. Quid fecisti? Quód mandasti, túi honoris grátia.

15. Túom libértúm 'sse aiebat sése Summanúm. Meum?

16. (Á) te expetere: ex ópibus summis méi honoris grátia.

* 1. Amph. 2, 2, 43. 2. Ib. 2, 2, 219. 3. Ib. 5, 1, 34; so Cod. Mon. 4. Ib. 5, 1, 54. 5. Asin. 5, 2, 42. 6. Aul. 3, 4, 4. 7. Ib. 2, 2, 55; (so MSS.). 8. Bac. 1, 1, 30 (61): so B. 9. Ib. 3, 1, 14. 10. Capt. 5, 2, 24. 11. Cas. 2, 6, 64. 12. 5, 3, 5, as corrected by me. 13. 5, 4, 16. 14. Cure. 4, 3, 17, where MSS. feci tui. 15. 4, 4, 26.

17. Hāncin' actatem éxercere méi amoris grátia.
 18. Túast legio : * adiúdicato cūm (c)utro hanc noctém sies.
 19. Túam amicam. Quid eam? Vidit. Vidit? uae miseró mihi.
 20. Túam amicam. Nímium multum scís. Tueis ingrátieis.
 21. Túam amicam. Quid eam? Vbi sit égo scio. Tūne óbsecro?
 22. Túo cum domino? Áio. Quid is aodís emīt has próximas?
 23. Háec diēs summa hódie est mēa amíca sitne líbera.
 24. Vólucres tibi erunt túae hirquinae. I ín malam rem. I tu átque eris.
 25. Súam huc ad nos cūm eo aiebat uélle mitti múliorem.
 26. Túae istae sunt. Cóntendo ergo utér sit tergo uérrior.
 27. Própera a portu túi honoris cáussa. Ecquid adportás boni?
 28. Méust hic quidem Stásimus seruos. Nam égo talentum mútuom.

These from Plautus. Then from Terence and Pomponius :

29. Túost nunc Chremés : facturum quáe voles scio ómnia.
 30. Túam amicam huiús 'sse amicam. Púlcre: quid hic faciet sua?
 31. Móre fit moríri sūam quísque uxor† utí velit.

I next take iambic octonarii :

32. Ipsúsque Amphitruo régem Pterelam súa obtruncauít manu.

16. Glor. 3, 1, 26; so Pyl. MSS. mihi honoris. 17. 3, 1, 32. 18. Men. 1, 3, so B 2 m. 19. Merc. 1, 2, 70. 20. 2, 4, 11. 21. 5, 2, 47. 22. Most. 4, 2, 61. 23. Pers. 1, 1, 34, dies Camer., MSS. de. 24. Poen. 4, 2, 51. 25. Ps. 2, 2, 55; so MSS. with A. 26. Rud. 3, 4, 47. 27. St. 2, 2, 14; so MSS. with A. 28. Trin. 4, 3, 48. 29. Andr. 5, 6, 12. 30. Haut. 2, 3, 92. 31. Pomp. p. Non. 127, 7. 32. Plaut. Amph. 1, 1, 96.

* This is the more interesting as it seems to be the only passage where *legio* has its original meaning, 'choice'; which led to the military use of the word as 'the élite' of the population. *Legio* from *lěgo* as *regio* 'direction' from *rego* 'stretch.'

33. Quia méo amico amicitēr hanc cōmmoditatis cōpiam.

34. Maledīcta famam méum amorem et péccatum in se transtulit.

To these add comic septenarii :

35. Quid quáeritabas? Mí homo et mēa múlter, uos salúto.

36. Quom illa ósculata méa soror geminá 'sset sūum amicum.

37. *Ab illá quae despoliát suos et túos digitos décorat.

38. A túa uxore míhi datum 'sse eamque illum deperíre.

39. Quid transejundum núnc tibi ad Menedémum et túa pómpa.

One Bacchic line :

40. Dicám túa ancilla quam tuó uilicó sis.

And lastly senarii :

41. En meá malefacta, en méam auaritiám tibi.

42. Miserét me illius. Túust. Non mirúm facis.

43. Nec lícítum intereast méam amicam uísere.

44. Cum túa amica cúnque amatió nibus.

45. Domó suppilas túae uxoris ét tuae.

46. Quia túi honoris cáusa huc ad te uénimus.

47. Matrem híc salutat súam, haec autem hunc filium.

48. Quid uís? Quia túam expécto rosculéntiam.

49. Sine núnc me méo uínere intereá modo.

50. Quam súa, an eo fit, quía in re nostra aut gáudio.

51. Íta me di amént ut uídeo túam inéptiam.

33. Pers. 2, 3, 3. 34. Ter. Ad. 2, 3, 10. 35. Pl. Cist. 4, 2, 57. 36. Glor. 2, 4, 33. 37. 4, 2, 57, where I omit *digitos* after *quae*. 38. 3, 3, 58; cf. the readings of the MSS. in Ritschl. 39. Ter. Haut. 4, 4, 17. 40. Cas. 3, 5, 26. 41. Trin. 1, 2, 148. 42. Bac. 4, 9, 121. 43. Cist. 2, 1, 14. 44. Merc. 4, 4, 54. 45. Men. 5, 1, 29, uxori MSS. 46. Poen. 3, 3, 25, where MSS.: *Quia nos honoris tui*, thus ludicrously making *nos* emphatic and *tui* non-emphatic. 47. Ib. 5, 3, 25. 48. Truc. 3, 2, 7; MSS. *qui* for *quin*; *rosculentiam* an ἀπαξ λ., a disposition to shed dew, i. e. money. 49. Ter. Andr. 1, 1, 26, so all MSS. 50. Haut. 3, 1, 96. 51. Ad. 4, 7, 31, where the useless *ego* follows *uideo* in A, follows *tuam* in the rest.

* The compression of *ab illa* in this line leads me strongly to suspect that we have an example of *tūi* in Trin. 2, 2, 95. *Tua re salua. Hóc pacto ab illo súmmam inibis grátiam.*

Not unfrequently the combination *mea uoluptas* occurs, where generally *mea* is regarded as a monosyllable, like the Fr. *ma*; but I am strongly inclined to believe that it should be read as *mēa uo'uptas*, viz.:

52. Hém istuc uerbum, m. u. uílest uigintí minis.—Pl. Most. 1, 3, 136.

53. Minis uiginti, m. u. uéndidit.—Ps. 1, 1, 52.

Add 54. Poen. 5, 4, 44. 55. 5, 5, 13. 56. Rud. 2, 24, 23. 57. St. 4, 2, 6. 58 and 59. Truc. 2, 4, 2, and 67. 60 and 61. 2, 6, 40 and 55. 62. 3, 2, 19. 63. 5, 7. That *uoluptas* in some cases must be shortened, has been shown above (p. 136); and to the evidence there given may be added Pl. Glor. 4, 8, 36; Truc. 2, 6, 59; and above all a line in Terence (Hec. 5, 4, 19):

Vt uoluptati obitus, sérmō, aduentus túos quocumque
adueneris,

where Umpfenbach, following Fleckeisen, twice deviates from all the MSS., writing *uti* and omitting *aduentus*, although this latter word stands in the lemma of Eugraphius and is the subject of a special note by Donatus.

Another example of an emphatic *mēam* is probably seen in the preceding line of the Hecyra; and similarly *tūa* in the Andr. 4, 1, 34; *sūi* in 5, 3, 9.

64. Antíquamque adeo túam uenustatem óptines,
where I read (but not write) *túam ué'statem óptines*, following the analogous *festa* for *fenestra*; and again in the very same scene (v. 8) such abbreviation is claimed by the metre for

Quís me est fortunátior uennstátisque adeo plénior.

So too Terence in the Phorm. 5, 3, 8, ^{2; Andr. 4, 1, 34; 5, 3, 9;} seems to have a shortened *uo'untate*, as:

65. Vt súa uo(1)untate íd quod est faciúndum faciat. Fáciam.

66. Scio tú coactus túa uo(1)untate és. Mane.

67. Morem átque legem et súi uo(1)untatém patris.

And to these again I might well add *mēam sen(ec)tutem* of Andr. 5, 3, 16.

But other words than the possessive pronouns exhibit the same variety of accent under emphasis, as first the datives *mihī tibi sibi*, e. g. :

- 1.* *Mīhī* obtinget sors. Vt quidem pol pēreas cruciatū malo.
2. *Mīhī* inanitate iamdudum intestina mūrmurant.
3. *Sibi* (monos.) sua habeant régna reges, *sibi* dinitias diuites, *Sibi*† honores, *sibi* virtutes, *sibi* pugnas, *sibi* prœlia.
4. Nonne id flagitiumst, te aliis consiliū dare,
Foris sâpere, tibi nōn posse auxiliârier.

Yet other instances occur, as :

5. Nêgo me dicere. Vt eum eriperet, mânū ‡ arripuit mór-
diens.
6. Pôst id ego te (= tibi) mânū ‡ iniciam quâdrupuli uenéfica.
7. Quid ego mōdo huic frâter factus, dūm ego introeo atque
exeo.
8. Dômi § erat quod quâeritabam. Sêx sodalis répperi.
9. Senis úxor sensit úrūm amorī operâm dare.

In support of the doctrine that the quantity of syllables may be affected by emphasis I have quoted instances in unusual number, feeling that it will be a startling novelty for many. The greater number of the passages so quoted have undergone surgical treatment at the hands of critics, desirous to remove such deformities ; and I had the more difficulty in collecting the evidence because the favoured texts were full of ‘emendations.’ But Ritschl was himself staggered when he found in the Mercator three examples commencing with the same combination, *Tuam amicam*. In the note to the first passage (his reference to his ‘Prolegomena’ should have been p. cciv.) his words show that even he was checked in his love of correction. “*Tam hæc gemella sunt,*” he says, “*ut de integritate scripturæ uix liceat*

* 1. Pl. Cas. 2, 4, 21. 2. Ib. 4, 3, 6. 3. Curc. 1, 3, 20. 4. Ter. Haut. 5, 1, 50. 5. Pl. Curc. 5, 1, 7. 6. Truc. 4, 2, 49. 7. Epid. 5, 1, 43. 8. Mere. 5, 2, 4. 9. Cas. prol. 58.

† Note the form *seibi* in an old inscription.—CIL. 1223.

‡ Perhaps pronounced *mandum*, cf. *mandare*, E. *hand*, and L. *pre-hend-o*.

§ Cf. *δωμα*.

dubitare." Lachmann in his *Lucretius* (Comm. p. 200) has dealt with several of the cases, holding the explanation to be that *tuam amicam*, etc. should be read without elision, so that *tūām ā* should be a solution of a trochee. But this theory, not very acceptable in itself, would be inapplicable in those cases where the next word begins with a consonant.

But we find the same reasonable principle still alive at a later date. The readers of Catullus can scarcely have failed to contrast the metrical laws which govern his hendecasyllabics with those of later poets, for instance Martial, especially the not unfrequent admission of what at first sight is an initial iamb. The surprise to many will be greater, as the very nature of the rhythm seems to require a stress upon the first syllable. But in more than thirty passages the received laws of Latin prosody would compel us to regard the initial syllable as short. In ^{five} instances however the offending disyllabic word is a possessive, *meus* or *tuus*; and in every instance well deserving an emphatic tone, especially:

Meas esse aliquid putare nugas.	1, 4.
Tua nunc opera meae puellae	
Flendo turgiduli rubent ocelli.	3, 17.
Quaeris quot mihi basiationes	
Tuae Lesbia sunt satis superque.	7, 2.
Meae deliciae, mei lepores.	32, 2.

In not a few an emphatic word of other form calls for a stress, as:

Malest Cornifici tuo Catullo	
Malest mehercule et laboriose.	38, 1.

Add nouem, 32, 8; eris, 40, 7 (cf. εἶσομαι); pudica, 42, 24.

Six examples consist of lines which commence with a sudden imperative, vocative, interrogative, or interjection; and so deserve prominence: *Adeste* hendecasyllabi quot estis, 42, 1; *Iube*, 32, 3; *Propinqui*, 41, 5; *Minister*, 27, 1; *quis*, 45, 25; *Amabo*, 32, 1; and in two of these, *quis* and *iube*, a long quantity may be already claimed on independent grounds. For *quis* see p. 33². Then as regards *iube*, there was a diphthong in the archaic *iou-*

serant, CIL. 196, 4; *iouisisset*, 196, 9 and 18; *ioubeatīs*, 196, 27; and further this verb seems to be only a decapitated variety of *κελευω*, the *i-consonans* being a substitute for the original *l* as in *iecur* = *ἥπαρ* = E. *liver*, in *iocus* = Lith. *jūkas* = E. *laugh*, *iuno* = *lēuo* = E. *lift*, an etymology which accounts for the twofold meaning of the verb, for 'to give a person a lift' is a familiar expression for assistance, and for 'great delight' we often employ a metaphor of elevation, as *elated*, *high spirits*, contrasted with *dejected*, and *low spirits*.

Again *an* in 40, 5, may itself be long (see p. 273), or we may read with MS. H 'anne'; and *at* in 45, 10 may also itself be long as representing an older *ast*, or again may give up its place to *ast*. *Tibi* in 54, 5 has, as we have just seen, the same right to a long penult as *sibi* and *miki*. A long initial syllable in *poetae*, 35, 1, and *tenens* 45, 2, would be countenanced by the Greek *ποιητης* and *τεινω* as well as the L. *tendo*. In 45, 24 MS. H has *fecit* which may be right. The same has *uenientem* (not *enntem*) in 35, 9. But the hardest case to deal with is the conjunction *et* in 2, 4 and 36, 9. Even here I no way despair, and though the matter requires not a few words; yet its bearings upon many questions concerning rhythm induce me to dwell at some length upon it. In the seventh of my Essays, p. 166, I threw out the idea that this conjunction had *en* for an earlier form; and I have since (p. 416) strengthened my case by pointing out that in Dutch the existing form is *en*. But on this theory *en* must have passed through the several stages *ent* with an excrescent *t*, and then with the *n* suppressed, *ēt*, which at last losing its quantity became *ēt*. But independently of this view a just pronunciation will more frequently than is commonly thought, place a pause after *et*. It is under this feeling that Latin poets often allow themselves to place *et* at the close of a verse. Thus we have to thank Donatus for preserving the little particle in Andr. 1, 1, 23:

Nam is póstquam excessit éx ephebis Sósia et
Libérius uiuendi* fúit potestas

* Pronounce *uindí*. Cf. *uita* for *uiuítá* = *βιοτή*.

But all the MSS. have *et* so placed in :

spéro consuetúdine et
Coniúgio liberáli deuinctúm Chremes (3, 3, 28).

Crédo et id factúras Dauos dúdum praedixit mihi et*
Néscio qui tibi sum oblitus hódie, ac uolui, dícere (5, 1, 21).

Similarly the MSS. in *Enn.* 2, 1, 11 ; 5, 4, 4 ; *Ad.* 1, 1, 13, have :

Cénsen posse me óffirmare et
Pérpeti, ne rédeam interea?

amórem difficillimum et
Caríssimum.

Quemquamne hóminem in animo institúere aut
Paráre quod sit cárius quam ipsést sibi!

While the Bembine of the same scene of the *Adelphi*, v. 16, has :

quae cógito et
Quibus núnc sollicitor rébus!

Yet some editors reject such readings as utterly inadmissible ; and to avoid such horrors either leave the metre in an unhappy state, or venture upon the rashest 'emendations.'

And metre will gain, if in *Pl. Bac.* 3, 3, 73, 74 ; *Ter. Ph.* 1, 2, 99, we read :

Ítane oportet rém mandatam gérere amici sédulo ut
Ípsus in gremio ósculantem múlierem teneát sedens.
Set epístolam ab eo adlátam esse audiui modo et
Ad pérfitores ésse delatam : hánc petam.

Horace again repeatedly gives to *et* a final place in his lyrics, as twice in ode 3, 27, four times in 3, 29. Such a position too prepares the mind for the more suitable reception of what follows. Indeed we occasionally have the same judicious use of a closing 'and' in English, as in Ben Jonson :

Oh how I do count
Among my comings in and see the mount,
The gain of your two friendships ! Heyward and—
Selden! two names that so much understand.

* See addenda to Umpfenbach's edition.

But it is not merely at the end of a line that I would ask for a pause after such a conjunction. Whenever Vergil admits elision before *et*, editors should, I think, insert a comma after the particle, for it is inherent in such cases that the two words so connected should be pronounced together, as in :

Parce pio generi et, propiús res aspice nostras ;

or

Mens agitat molem et, magnó se corpore miscet ;

or better still :

Composito rumpit uocem et——me destinat arae.

So in such English lines as Pope's: "Dost sometimes counsel take and—sometimes tea"; "Or stain her honour or—her new brocade"—our editions place the comma before the particles, *and*, *or* ; but it would be quite lawful, perhaps better, to make the pause after them.

The same principle of emphasis which justifies, as Hermann says, the lengthening of even a short syllable *in initio sententiæ* seems to account for the substitution of a trochee in the place of the legitimate foot at the beginning of iambic measures. The practice is familiar to English poets, as in Walter Scott's

Woe to the youth, whom Fancy gains
Winning from Reason's hands the reins ;

or again in Lalla Rookh :

Oh for a tongue to curse the slave
Whose treason like a deadly blight
Comes o'er the counsels of the brave
And whelms them in the hour of might.

Ritschl, I am aware, in the first volume of his *Opuscula* ridicules those who would claim for the poets of Greece and Rome the same licence, which he regards as a heresy of English poetry, and one that no German poet would adopt. But I believe him here to be wrong in fact; and in proof of this I need but quote Goethe's familiar line: "Kennst du das Land wo die Citronen blühen," where a good reader would as certainly give the emphasis to *Kennst*, as to *Knowst* in Byron's imitation: "*Knowst*

thou the land of the cypress and myrtle," for the fact of his metre being different no way affects the question.

Hermann (de Metris, 60) seems to think that the short vowel in the second syllables of ἵππομεδοντος, Παρθενοπαῖος, Ἀλφειβοῖαν at the commencement of Iambic lines in Aeschylus and Sophocles was lengthened by emphasis: 'cum metri prima arsi coniuncta'; but a more legitimate explanation is, that, here as with us, a trochee might well, as an occasional variety, supplant an iamb.

The same licence, or rather pleasing variation, let me claim for Plautus, as in:

- *1. Dá mīhi hanc uéniam, ignóscē, irata né sies.
2. Né tībi hercle háut longē ós ab infortúniost.
3. Núnc sibi utérque cótra légionés parat.
4. Nám mīhi Auxílio nómen, nunc operám date.
5. Quí tībi auxiliū in iúreiurandó fuit.
6. Mé tībi habéto, ego mé (ei) manetipiódabo.
7. Né mīhi incócta détis. Rem loquitúr meram.
8. Nam ís mīhi honóres suáe domi habuit máximos.
9. Quid tībi hanc dígitō táctiost? Quia mīhi lubet.
10. Nám mīhi hacc méretrix quae híc habet Phronésium.

So far we have throughout an elided dative of a personal pronoun; and so may perhaps infer that a commencing trochee is heard in:

Μη σοι † δοκουμεν τηδε λειφθηναι μαχη. Aesch. Pers. 344.

Δος μοι † σεαυτον· κα̑τα τον λοιπον χρονον. Soph. Ph. 84.

But in Plautus and other Latin writers of the drama the variety is not so limited to datives of pronouns. Thus we have:

11. Índeque obsérúabo áurum ubi abstrudát senex.

* 1. Amph. 3, 2, 43. 2. Bac. 4, 2, 13. 3. Cas. pr. 50. 4. Cist. 1, 3, 6. 5. Cure. 2, 2, 17. 6. Glor. 1, 1, 23. 7. Pers. 1, 3, 13. 8. Ib. 4, 3, 43. 9. Poen. 5, 5, 29. 10. Truc. 1, 1, 58. 11. Aul. 4, 6, 13.

† This treatment of a diphthong *oi*, as in some cases short, has its parallel in the short *ai* of *τριαῖνα τυπτομαι* as stated in p. 194.

12. Báčchidem. Vtram érgo? Níl scio nisi Báčchidem.
13. Vílicus ántem cúm corona cándide.
14. Póstea accúbam : quási nix tabescít dies.
15. Quós quidem quam ád rem dícam in argentáriis.
16. Mé quidem hercle, édicam * palam, non díuides.

And then from Terence :

17. Siue te hacc sólum sémper fecit máxumi.
18. Quícquid † huius fáctumst, cúlpa non factúmst mea.
19. Síquid † huius símile fórte aliquando euénerit.
20. Cómmeare ad muliéreulam quae páululo.

And again from the fragmentary drama :

21. Vós qui accólitis Istrum flouiom atque álgidam.
22. Hórrida honéstítudo Europae princípium primo éx loco.
23. Nátus ut túte scéptrum poteretúr patris.

I have yet more to claim. It is commonly laid down that the accusatives *me*, *te*, *se* are invariably long; yet why should we refuse short enclitic pronouns in Latin corresponding to $\mu\epsilon$ $\sigma\epsilon$ and $\acute{\epsilon}$ in the sister tongue? For instance in :

- Út te libénter nídeam quom ad nos uéneris, Pl. Men. 3, 3, 19.
 Nón te pudét prodíre in conspectúm meum, ib. 5, 1, 8.
 Íta me di amábunt, mórtuom illum crédidi, Most. 2, 2, 87.
 Íta me di amábunt, út nunc Menedemí uicem, Ter. Haut.
 4, 5, 1.

Tót me nunc rébus míserum concludít pater, Hec. 4, 4, 80.

There are some passages, on which I more particularly rely, viz. where two words are essentially connected, and so could not tolerate an intervening pronoun, except as an enclitic, e. g. :

12. Bac. 4, 2, 6. 13. Cas. 4, 1, 9. 14. Stic. 5, 1, 8. 15. Truc. 1, 1, 51.
 16. Aul. 2, 4, 4; edicam in opposition to preceding ediscit; MSS. dicam. 17. Andr. 1, 5, 58. 18. Eun. 5, 5, 10; huius a monos. 19. Haut. 3, 2, 40; but see preceding ex. 20. Haut. 3, 1, 35, for so all the MSS. including Bembiue; commetare is a mere cj. of Bentley's. 21. Naev. Ribb. 69. 22. Acc. tr. 501 R. 23. Ib. 590.

* MSS. *dicam*, but note the final *e* of *hercle*.

† Unless *quicquid* and *siquid* be elided (see below); and *huius* a disyllable.

Vél me mouére hoc uél percontarí puta, Haut. 1, 1 26.

Réi te quaerúndae cónuenit operám dare, Pl. Merc. 3, 2, 8.

Pér te deos (= dyos) oro et nóstram amicitíam, Chreme, Ter.
Andr. 3, 3, 6.

And in these three lines the commencing monosyllables, in themselves claiming an emphatic utterance, tend to weaken the following pronoun.

I should not omit that in claiming a short vowel for *me te se* when not emphatic; I am only following the guidance of Bentley, who in the preface to his Terence does the same, appealing, as I have, for confirmation to the sister tongue.

But I return to the consideration of disyllabic words with a short first syllable, pyrrhics and iambs, as *mālŭs*, *mālī*, etc. in which my dissent from the Grammarians is the greatest. I have already pointed out that exceptions admitted by themselves cover not a few words, as, *differentiæ causa*, *cănó* as opposed to *cāno*, and words that have suffered apocope as *feróx* for *ferócīs*, *amánt* for *amánti*, compared with *cuidás* for *cuiátis*. I now proceed to other arguments by which I would rescue disyllabic words with a short penult, from the unacceptable doctrine, which would assign an acute accent to the penult. But I would first premise that in the Latin, as in most languages, letters at times are written which are not pronounced. This, in itself *a priori* probable, has the support of authority. Thus Suetonius in his Life of Augustus (c. 88) tells us: "Orthographiam, id est, formulam rationemque scribendi a grammaticis institutam non adeo custodiit, ac uidetur eorum potius sequi opinionem, qui perinde scribendum ac loquamur existiment. Nam quod sæpe non literas modo sed syllabas aut permutat aut praeterit, communis hominum error est;" and we know from the preceding chapter that Suetonius spoke with a personal knowledge of the Emperor's handwriting. Quintilian (11, 3, 33) has what confirms this: "ut est necessaria uerborum explanatio; ita omnes computare et uelut adnumerare litteras molestum et odiosum." Again Priscian in the third chapter of his 'de Accentibus,' speaking of *uigil uigilis*, says: "magis uidetur per syncopam

proferri," a view which agrees with the Ital. *vegliare* and Fr. *veiller* and the pronounciation demanded by the line in Terence :

Ne súrsum deorsum (pron. jorsum) cúrsites, néue úsquam ad
lucem uí(gi)les—Eun. 2, 2, 47.

In some cases then, although a disyllabic form was presented to the eye, a monosyllabic utterance was no doubt familiar to the ear. This we may safely say in the case of *nihil*, *neque*, *nisi*, *mihi*, seeing that these words were often written as monosyllables. So again it is generally admitted, I believe, that *deus* was at times so pronounced, like the Gr. *θεος* (cf. Stic. 2, 2, 70 ; Pers. 4, 4, 34). Ritschl too is of course right, when (proleg. 160) he makes a similar claim for *dies*, *die*, as in Trin. 2, 4, 177. and 4, 2, 1 ; as also for *diu* in Trin. 1, 2, 27 ; Glor. 3, 1, 129. So too for *scio*, *scies*, *sciunt*, etc. in Trin. 3, 2, 29 ; Bac. 4, 8, 12 ; Pers. 5, 2, 71 (cf. Bentley ad Andr. 3, 3, 33) ; for *meus*, *tuus*, *suus* in Trin. 1, 2, 80, 102 and 127 ; for *eum*, etc. in 1, 2, 81 and 99 ; for *fuit* in Trin. 1, 2, 69 ; Capt. 5, 2, 13. Here we may appeal to the Ital. *so* = *scio* ; and the Fr. *ma*, *ta*, *sa*, etc.

So far for the most part the examples have had vowels in immediate juxta-position. But there are not a few such disyllabic words where a consonant intervenes ; and let us take first the case of the *u-consonans*, as in character allied to the family of vowels. Bentley in a note to the Hecyra (3, 1, 32) so reduces *leui* ; and he does the same for *nouos* in the Phormio (5, 8, 15), as :

Itidem íllae mulierés sunt ferme ut púeri leui (=lei) senténtia ;

Ego nóuos (=noos) maritus áнно demum quínto et sexagénsumo.

Similarly Ritschl treats *boues*, Ps. 3, 2, 23 ; Aul. 2, 2, 57 ; *Iouem*, Amph. pr. 90 ; Rud. p. 23.

But the same holds of mutes generally, where the preceding vowel, as in the examples already given, is short. In p. 137 was pointed out the French habit of omitting the consonants *c*, *g*, *t*, *d*, when flanked by vowels in the derivation from Latin. The examples there given were of geographical terms ; but the

change holds generally in that language. Now the same was already well known to the parent. Thus the *g* seems to have been at times silent in *roga* in Plaut. Ps. 1, 1, 112; Cure. 5, 3, 30; Men. 5, 9, 47; Most. 3, 1, 150; Poen. 5, 2, 48; Ter. Hec. 4, 1, 43; Eun. 4, 4, 25; and *roget*, Eun. 3, 3, 5.* So too the *c* in *tacet*, Ad. 4, 5, 5; in *facis*, Pl. Capt. 5, 1, 29; Stic. 4, 1, 59; the *d* in *uide*, Eun. 2, 1, 18; *uiden*, 2, 2, 34 and Pl. Stic. 4, 2, 53 and 54; in *studet*, Ter. Ad. 1, 1, 48; *student*, 5, 7, 2. *Fides* again is but a monosyllable in:

Fide data credámus. Noui: omnes sunt lenae léuifidae,
Pl. Pers. 2, 2, 61.

Pró deum fidem, fácinus foedum! o infélicem adulescéntulúm,
Ter. Eun. 5, 4, 21.

Át mihi fides aput híuc est, nihil me istíus facturúm pater,
Haut. 3, 3, 10.

The assumption of silent consonants has a clear support in the fact that *facio* as an intransitive verb was cut down to *fio*

* I think I see a similar loss of a γ in $\epsilon\rho\omega\tau\alpha$ - for $\epsilon\rho\omicron\gamma\tau\alpha$ - (with an excrecent τ), for this verb must be of the same stock with $\epsilon\rho\omicron\mu\alpha\iota$ and $\epsilon\rho\epsilon\omega$ 'I ask.' *Roga*-, like other words with an initial *r*, was no doubt decapitated, standing for *er-og-a*, or rather *ar-og-a*-, where I give a preference to the *a*, as more obedient to the law of vowel-assimilation; especially when I compare $\epsilon\rho\delta\omega\nu\iota\omicron\varsigma$ with L. *ardea* 'the heron,' and the interchange of the prefix $\epsilon\rho\iota$ with $\alpha\rho\iota$. I may note too that a L. $\overset{\alpha\rho}{a}\text{-}\overset{\epsilon\rho}{r}\text{og-}$ corresponds with all accuracy to our *as-k*, in which the *k* plays the same part as in *har-k*, *wal-k*, *tal-k*. But to return to the Greek, whether C. A. J. Hoffmann be right, when in his 'Quaestiones Homericae,' § 151, he would separate, as no way akin, the forms which signify 'to say' from those which signify 'to ask,' I leave for others. But as he claims an initial digamma for the former, so he adds: "In vocibus $\epsilon\dot{\iota}\rho\omicron\mu\alpha\iota$, $\epsilon\dot{\rho}\epsilon\sigma\theta\alpha\iota$, $\epsilon\dot{\rho}\acute{\epsilon}\omicron\mu\alpha\iota$, cum quaerendi seu interrogandi sit notio; has voces putaverim pertinere ad radicem eandem quae est in Latinorum *quae-rere*. Habuerunt fortasse digamma hae voces antiquitus, sed apud Homerum nullum est ejus literae indicium." The existence of an initial digamma, thus suggested, is in agreement with the belief that the G. *f'r-ag-en* is one with the L. *roga-re*. For the assumption that the τ was excrecent in the theoretic $\epsilon\rho\omicron\gamma\tau\alpha$ - and so led to the suppression of the γ with the compensation of a long vowel, compare $\gamma\epsilon\lambda\omega\tau$ - and its G. analogue *Gelücht-er*, in which I hold the *ge* to be part of the stem, and no way one with the G. prefix *ge*.

(for *faio*), so that *deficit* and *defit* are at bottom the same word, and it is but an accident that we have no *suffit* by the side of *sufficit*; and the identity of the two words *facio* and *fio* is supported by their common constructions, as *fit potestas* and *facere potestatem*; *ut quanti quisque se ipse faciat tanti fiat ab amicis*; *nescio quid faciam auro*, and *quid Tulliola mea fiet?* in speaking of 'sacrifices,' even without *sacra*, *pro populo facere* and *pro populo fieri*; and lastly the Lucretian *interfieri* 'be made away with' by the side of *interficere*, 'make away with.' The same suppression of a *c* accounts for the form of *inuītare* from a lost *inuocitare*.

But the interposing consonant may be a liquid; and in that case there may be several ways in which the contraction to a single syllable may have been brought about. In the first place the liquid itself may have been absorbed, as in *tamen*, reduced to *ta'n* (see p. 134); *domi* (= *doi*) As. 1, 3, 84; Aul. 1, 1, 34; Capt. pr. 21; 2, 1, 3; Most. 1, 3, 124; &c. And one of these (Glor. 2, 2, 43) I cannot refrain from quoting:

Dó(m)i dolos, do(m)i délenifica fácta, do(m)i fallácias.

In this case we have a confirmation of the doctrine in the epic use of *δω* for *δωμα* and *δωματα*. But the same compression occurs at times in *domo* (Capt. pr. 18; Stic. 5, 3, 3); and in *domum* (Amph. 2, 2, 12; Glor. 3, 2, 45).

The silence of an *n* is probably seen in those cases where *bonus*, etc. is reduced to a monosyllable, as *bonā*, Pers. 4, 3, 16; *bonis*, Rud. 4, 3, 2; *bono*, Capt. 3, 2, 2; *bonum*, Stic. 5, 4, 44; *bonus* before a consonant, Capt. 5, 2, 3; Glor. 2, 4, 11; 3, 1, 168; 3, 3, 37; 4, 8, 55. And here we have a parallel case not merely in the Portuguese *boa*, but in the L. vb. *beare* which is assuredly of the same stock. Similarly the prep. *sine* seems to drop its *n* in some cases where its following noun begins with a vowel, as:

Núnc sine omni suspícione in ára hic adsidám sacra
(Aul. 4, 1, 20).

Add Trin. 3, 1, 20; Ter. Andr. 1, 1, 39. Here again the old form *se* (= *sine*) supports the view. The verb *uis* as growing out of *uois* from *uolis* has been already mentioned; as also the

parallel loss of the *l* in a not unfrequent utterance of *uoluntas* and *uoluptas* (p. 136).

Another mode of reducing such forms to a single syllable is by the omission of the first of the two vowels. Thus some would read *senex* as *snex* in Ter. Haut. 1, 2, 23 and Hec. 4, 3, 15:

Immo ille fuit senex importunus sēper, et nunc nihil magis—
Sumus, Pámphile senex átque anus.

~~But I am not singular when I propose rather to treat it as a monosyllable, for~~ Such treatment of the word was at any rate suggested by Faernus, as in his note on the first of the two passages. ~~Perhaps he would have read it as~~ *s'nex* (see Bentley, Eun. 2, 3, 66), a pronunciation that has been erroneously ascribed to myself, for I have long held that it would be better to read it as *sēn*, i. e. as representing that old lost nominative whence the oblique cases were deduced; in other words the simpler noun of which the *sen-ec-* is a diminutive. Still much may be said in favour of the other treatment, for the inquiry into decapitiation in the ninth chapter seems to involve the assumption that the vowel of an initial syllable was first absorbed, as in *nosco* for *gnosco* and that for *gonosco*; in *repo* for *srepo* and that for *ser-ep-o*. I have deduced *col-or* from a root *col*, whence *c(o)l-ubo* (*glubo*); but the Gr. *χρως* is of course of the same stock and seems to suggest a pronunciation *clor* in Eun. 2, 3, 27:

Color uérus, corpus sólídum et suci plénum. Anni? Anni?
sédecim.

The L. *glans* by the side of *βαλανος* exhibits the same form of contraction.

Again the vowel of the first syllable may itself be initial as in *amor* and *crus*. In some of these cases I believe the initial vowel to have been at times silent, as in *amor* (Ter. Andr. 1, 5, 26):

Amor mísericórdia húius nuptiárum sollicitátio.

and this I say after considering the changes which produce the forms *mālus*, *mālum*, *mēto*, *μαυπος*. See p. 127.

The oblique cases of *er* seem also at times to have dropped the *e*, and in such a word we may well look for abbreviation

after what was seen in the case of *maam*. An example is clearly seen in the Glor. 2, 4, 9:

Eri concubinast hæc quidem. Mihi quóque pol ita uidétur.

So in the Poen. 1, 2, 184 *cum ero* has a fitting pronunciation as *cúm-ro*, and here one would not willingly accept a non-elided *cum*.

But in the nom. *erus*, as also in such forms as *bónus*, *málus*, *ánus*, it would probably be better to drop altogether the *us*, reading them as *er*, *bon*, *mal*, *an*; and I say this partly on the evidence of *puer* for *puerus*, *uir* for *uirus*, *satur* for *saturus*, *uigil* for *uigilis*, partly on consideration of the loss of the nominative *s* in words whose stem ends in the liquids *r l n*, as *linter*, *consul*, *lien*. But over and above this the removal of the vowel of *bono-malo-ann-* involves nothing more than the loss of the suffix of diminution which here counts for little; and in fact the shortened forms here suggested may well pass as nominatives of the simple nouns. At any rate by the proposed abbreviation we have satisfactory metre in the following lines, the letters included within brackets being treated as silent:

Vérba multa fácimus. Er(us) si túus domist, quin prouocas?
(Ps. 2, 2, 43).

Est é Corinthó hic áduena an(us) paupércula (Haut. 1, 1, 44).
An(us) quáedam prodit: hæc ubi aperit óstium (2, 3, 35).

In this treatment of *erus* one is reminded of the G. *Herr*, and the reduction of *anus* to *an* corresponds to what has been proposed in the case of *senex*.

It may be observed that the same 'crasis' which has been assumed in several of the preceding arguments plays its part in longer forms. Thus as *diu* is crushed into the sound that is heard in the first syllable of the E. word *jew-el*, so a similar compression in the comic use of *diutius*, *deorsum*, *deambulo* is perhaps invariable in the comedians, and for *deorsum* I may add Lucretius. The *u* consonans again loses its consonantal character in forms like *cauillatio*, *auunculus*, as found in:

Caullátiones, ádsentatiúnculas.—Pl. Stic. 1, 3, 75.

Fac méntionem cum áuoncúlo matér mea.—Aul. 4, 7, 3.

Add for the former class of words *True*. 3, 2, 15 and 17 ; for the other *Aul.* 4, 10, 48 and 69 ; and here we have some support in the modern forms *oncle, uncle, Enkel*.

Other examples of compression in longer forms are seen in *noluntas, uoluptas* (see p. 136), *uenustas, senectus*, etc.

On the whole then we find evidence that seems to justify an occasional monosyllabic pronunciation of many words which to the eye are pyrrhics or iambs. But I am not wedded to my own suggested abbreviations, and readily join in the words of Ritschl, when speaking on this very subject he says (*Proleg.* p. 147) : “*Verum difficile est et lubricum, quid uitae consuetudo ueterum probare uel potuerit uel non potuerit, assequi ratioecinando et comminiscendo uelle.*” But in no case can I accept the views of that German school which would remove all the metrical difficulties in Latin comedy here brought under notice by treating as short the final syllables of words ending in a consonant themselves and followed by a word with an initial consonant, e. g. *soror, color, amor, pater, caput, decet, semol, rogan, uiden, iuben*, as though the final consonants were actually dropped, *soro’, colo’,* etc. Nay we are told to subject to the same treatment words in which the final consonant was preceded by a vowel long by nature, as *bonas, foras, negas, nouos, uiros, dolos, manus* (pl.), *oues, uides, oles, clues, habes, bonis, uiris, modis, dolis, abis, uenis* ; and again words which end in a syllable long by position, as *solent, student, habent, senex* ; and all this even though again the following word begins with a consonant. See especially the ‘Introduction’ to Wagner’s *Aulularia*.

At any rate in the case of *soror* there is no occasion for such violent surgery. That this word cannot always be pronounced with its full complement of letters is proved by such instances as :

Núnc ego istum sóror laborem démam et deminuám tibi.

Sátis nunc lepide ornátam credo, sóror, te tibi uidérier.

Add the Bacchic line :

Mirór equidem sóror te istaec sic fabulári.

These from Aul. 2, 1, 43; Poen. 1, 2, 84; 1, 2, 24; add Stic. 1, 2, 11,; and Ter. Eun. 1, 2, 77.

But surely a safer course is to call in aid the doctrine which claims a compression when the same syllable is repeated (see p. 137).

And here I may also call in question the habit which prevails in the same school of overloading the comic metres with short syllables, proceleusmatics being in especial favour. In some of the 'schemata' of Terentian metres it used to be asserted that every foot of a senarius, saving the last, may have a 'tribrach' or even a 'tetrabrach,' if we may invent the word, as a substitute for an iamb. My German friends would scarcely carry matters to this extent; but they do enough I think at times to annihilate all rhythm. At the same time I would not, like Fadladeen, altogether exclude the solution of iambs and trochees; an occasional use of this variety being an agreeable diversion, as in Moore's

Like the sweet exquisite music of a dream.

In what has been here stated I seem to find one advantageous result, in that so far I avoid the to me unreasonable course of throwing an accent on a short syllable. But while I thus attempt to satisfy the accentual theories of the grammarians to a certain extent, I still hold without the slightest hesitation, that disyllabic words with an accent on the final are found in the Latin as in other languages, as *dedít*, Ter. Andr. 1, 1, 62; *rogó*, 97; *negét*, 122; *moráe*, 139, as follows:

Dedít, cenauit. Gáudebam item alió die.

Quac sít *rogó*. Sorórem esse aiunt Chrysidis.

Negét daturum. Nón tu ibi gnatum? Ne háec quidem.

In Pámphilo ut nihil sít *moráe*: restát Chremes.

These examples are taken from Latin comedy, but others of course abound in Vergil, Horace, etc. as:

Albanique *patrés* atquæ altae moenia Romae.

Disiectaeque *ratés* euertitque aequora uentis.

Magna *pará* longumque *fugáe* ne linque laborem.

Euitata *rotis* palmaque nobilis.

Laudat rura *suí*; mox reficit rates.

But the subject of the accentuation of pyrrhics and iambs is not even yet quite exhausted. One branch of it will claim consideration in the following chapter.

CHAPTER XXXV.

ACCENT, AS AFFECTED BY THE UNION OF WORDS OR
ELISION.—ACCENT IN VERGIL AND HORACE.

IN the preceding chapter (p. 457) I had occasion to quote a passage from Quintilian, in which he spoke of accent as modified by the 'coniunctio uerborum'; and in this idea I find an explanation of much that would be otherwise unintelligible in the matter of accent.

The definition of a word is one of some difficulty, and at any rate we must not leave it to the printer, so as to hold that what he incloses within two portions of white paper constitutes a word. As speech addresses itself first of all to the ear, it would be safer to acquiesce in the doctrine that what is spoken 'sub uno accentu' is a word. But with this we are brought to the conclusion that so-called proclitics and enclitics are themselves not words but parts of words; a proclitic being read with what follows it, as *at* in *at home*, an enclitic with what ^{brève des} follows, as *one* in *no one*. The Greek grammarians, says Hermann (de Emend. Gr. Gr. p. 96), limit the proclitics of that language to ten, viz., the def. art. $\acute{o} \eta \acute{o}i \acute{a}i$, the monosyllabic prepp. $\epsilon\acute{\iota} \epsilon\acute{\xi} \acute{\epsilon}ν$, and the particles $\circ\acute{\upsilon} \acute{\omega} \varsigma \epsilon\acute{\iota}$, to which however he would add others; but his additions are very limited. For example a disyllabic preposition when subject to elision he would treat as the monosyllabic prepositions just quoted. Why $\tau\acute{o}$ and the oblique cases of the definite article are not also to be regarded as proclitics, seems to be inexplicable on rational principles. My own belief goes far beyond the views of Hermann. First of all I would treat all prepositions as proclitics, not that I would deny to

them the privilege of an accent; but in all cases I would read them as united with their noun, the accent of the combined word being determined by the usual accentual laws. Thus *κατά-πτολιν*, *ὑπό-χθονος*, *ἀνέυ-δορος* would have the accent on the antepenult, that is, in this case, on the final of the preposition.

That we are bound so to deal with prepositions in Latin, and it is of this language that I speak with most confidence, is proved by various considerations. In the first place such particles in old inscriptions are very commonly united with their noun. Thus in Mommsen's *Corpus* we find *aquo* 205, 1; *abeo* 206, 161; *adeum* 206, 8; *adeam* 198, 65; *depecunia* 206, 44; *exformula* 203, 8; *elege* 206, 49; *encastelum* 199, 17; *indiebus* 206, 24; *obeas* 199, 43. So far the noun goes with the preposition; but the attachment is frequently to a genitive which qualifies the noun, as *depagi sententia* 801; *indemortuei locum* 206, 87; *incorum oppido* 205, 2.

Another proof of the connection is seen in the place given to *que* and like particles in forms such as: *eterraque* (Lucr. 1, 187), *deniloque* 1, 674; 1, 757; *innumerumque* 2, 631, etc.; *subpedibusque deae* (Aen. 2, 227), *inpartisque rapit* 4, 286; and even with a disyllabic preposition in: *caelestia mundi Templa superstellisque micantibus aethera fixum* (Lucr. 5, 1205); and similar instances of a preposition adhering to the genitive of its noun ^{2^{re}} seen in: *Exaurique putat micis* (Lucr. 1, 839); *Exanimique uoluntate* (2, 270). And again adhering to the adjective: *Inmedioque sitit torrenti flumine potans* (4, 1100); *inmedioque ardentem deserit ictu* (Aen. 12, 732). I quote those passages from poets, because the metre guarantees the order of words; but the same order of words is of course familiar to writers of prose. Again when a disyllabic preposition is followed by a noun of one syllable, the accent goes far to prove the close union, as (Aen. 5, 433):

Multa uiri nequiquam inter-se uulnera iactant.

Of this a large collection of examples might be given. On the other hand if a preposition be repeated, then it naturally assumes greater force, and so may stand apart from its noun, as :

In latus inque feri curuam compagibus aluom Contorsit
(Aen. 2, 51).

In caput inque umeros (12, 293).

And the truth of this distinction is proved perhaps by the parallel treatment of prepositions in compound verbs as by Plautus (Trin. 4, 1, 14): *Distraxissent disque tulissent*; and more frequently Lucretius, as: *Sed penitus percunt conuolsi conque putrescunt* (3, 344); *implicitus . . . inque peditus* (4, 1149); *pertundere perque* forare (5, 1268); *protracta . . . proque uoluta* (6, 1264): and similarly Vergil ventures upon a division in Aen. 10, 794: *Ille pedem referens et inutilis inque ligatus* Cedebat, although here the *in* of *inutilis* is not the preposition.

Another proof of the intimate connection between a preposition and its noun lies in the habit of rarely allowing an adverb intended to qualify an attached adjective to interpose between a preposition and such adjective. This has been specially noticed by Madvig (ad Cic. fin. 5, 9, 26) and established by numerous examples from Plautus, Terence, Cicero. Let me add a few others, as: *út pater Tám in breui spatio ómnem de me eiécerit animúm patris*, Ter. Haut. 5, 2, 2; *Pueri ínter sese quám pro leuibus nóxiis irás gerunt*, Hec. 3, 1, 30; *homines quamuis in turbidis rebus sint, tamen . . .*, Cic. Phil. 2, 16, 39; *ferro uia fit quamuis per confertos hostes*, Liv. 22, 50, 9; *admodum a paucis adiuti sunt*, 8, 13, 4; *haud in dubia spe erant*, 8, 2, 5; *rem fere haud cum imparatis*, 21, 49, 11; *O quám de tenui Romanus origine creuit*, Ov. Fast. 3, 433. Yet another proof of the connection is seen in the fact that an assimilation of the consonants is occasionally met with, just as in the composition of verbs, e.g. *impriuatum*, CIL. 200, 27; *im fronte*, ib. 1104; *Solet illa recte súmmanus succédere*, Pl. Pers. 4, 1, 2 (so MSS. B, C, D); *atte (= ad te)*, Truc. 2, 7, 25 (B, C, D); *offactum*, Ter. Haut. 5, 2, 3; *oppeccatum* 5, 2, 37 (so Bembine).

But besides prepositions many little words seem to have been pronounced as proclitics, as first negatives. Here we have the example of the Greek *ουκ* (*ου*) (see above) and *μη*, adding the latter partly on the evidence of the already quoted *μη-καλα καλα*

πεφανται, but also on that of the combinations *μη* 'πεπλησσε (Prom. 86) and *μη* *ou* regarded as a single syllable. Thus in Latin also we have *nequeo, nescio, nolo, nequis, nequando, nemo*, etc.; *nullus, numquam, nusquam; nihil, nisi*. Hence too such constructions as: *omnia complecti non-dubitantem-que dicere . . .*, (ic. ñn. 5, 9, 26; *quid faciendum non-faciendum-ue sit* (1, 14, 47).

But the relative and conjunctions and other particles are also not unfrequently proclitics, when, as is their ordinary habit, they head their respective clauses. Many years ago, when collating a MS. of Livy, I believe it was the Harleian No. 2672, for the cc. 1-17 of the 6th book, I found the following words written as proclitics, the number of times attached to each word: *qui* 2, *quae* 1, *qua* 1, *quo* 1, *quod* 4, *quum* 6, *quam* 4, *quin* 2, *ut* 18, *si* 8, *nisi* 1. So far we have words which are either relatives or akin to relatives. Besides these occurred as proclitics the conjunctions, *et* 1, *nec* 7, *aut* 1, *at* 1, *an* 2, and the adverbs, *tum* 4, *tam* 1, *iam* 1, *sic* 2; the negative particles, *ne* 7, *non* 23. Further it may be noted that there were 251 monosyllabic prepositions so written against 48 not so written, and 10 disyllabic prepositions against 7 not so written.

An attention to this 'conjunctio uerborum' will often solve metrical difficulties, as in the lines:

Ét aliis qui cómitati símus beniuléntibus (Pl. Trin. 2, 2, 75).

Ín alio occupáto amore, abhórrenti ab re uxória (Andr. 5, 1, 10).

Sine súmptu et sine dispéndio: tum hoc álterum (Eun. 5, 4, 7).

An in ástu uenit? áliut ex alió malum (5, 5, 17).

Hóc beneficio utríque ab utrisque uéro deuincímíni (Haut. 2, 4, 14).

Véra dicendo út eos ambos fállam: ut cum narrét senex (4, 3, 33).

Át enim spem istoc pácti rursum núptiarum omnem éripis (4, 3, 35).

Progéníem uostram usque áb auo atque atauo próferens (Ph. 2, 3, 48).

Vt amíci inter nos símus. Egon tuam éxpetam (2, 3, 84).

Álius áb oculis meis illam in ígnotum abducēt locum (3, 3, 15).

Ita uelim sed quí istuc credam itá 'sse mihi dici uelim (5, 6, 15).

Néque alio pactó componi pótis intér eas grátia (Hec. 3, 5, 29).

In all the examples here quoted the junction of the particles and prepositions with the nouns leads to a polysyllabic word in which the law of two or more consecutive short syllables comes into play, and then by the suppression of the second short vowel, at any rate as a vowel, we are brought to words, the accent of which coincides with the demands of the several metres, as: 1. Ét-aliis-qui; 2. ín'lio; 3. sin'-súptu; 4. an'n'ástu; 5. ab'trisque; 6. útyos; 7. át'nim; 8. áb'uo; 9. ut'míci; 10. áb'enlis; 11. ít'uelim; 12. néc'lio; 13. intéryas.

Enclitics have long been admitted into the classification of grammarians; but their number has been unduly limited, as the name is commonly granted to those alone which the printer connects with a preceding word, as *quě, uě, ně, cě* in Latin; but assuredly the name should also be given to those particles which are never allowed to take precedence in a clause, as *quidem, quōque*.

But there are many other words which suffer this degradation, as first postponed prepositions, to use an awkward phrase. Thus *cum* is an enclitic in *mécum, técum, quibúscum*. But the same holds of prepositions which follow a genitive or adjective that belongs to their nouns, as: *Troiáno a sanguine, uná cum gente, Troiáe sub moenibus, quorúm sub uertice, facti de nomine*. In some cases the preposition more readily accepts the position of an enclitic after its noun, if an adjective or noun in apposition to it follow, as *meritis pro talibus, Remó cum fratre*. Still more decided examples are two in *Lucr.* (3, 705, and 6, 279):

Sic anima atque animus quamvis integra *recéns in*
Corpus eunt.

ipse *suá cum*

Mobilitate calescit et e contagibus ignis.

The indefinite *quis* of course is invariably an enclitic, so that examples need not be quoted. But to the same class belong the relative itself and all conjunctions, when they resign the place of honour at the beginning of a clause in favour of other words, and these words when so prefixed have always much importance. As this point rarely meets with the notice which it deserves I shall quote not a few examples, taking in order *a.* substantives, *b.* adjectives, *c.* verbs, *d.* adverbs, as :

- a.* Súcofantiás componit, áurum ut abs ted áuferat (Pl. Bac 4, 4, 88).
Si est pátrúe, cúlpam ut Ántipho in se admiserit (Ter. Ph. 2, 1, 40).
Nos tua progenies, caelí quibus adnuis arcem (Verg. Aen. 1, 254).
- b.* Vt súnt humana, túos ut faciat filius (Ter. Haut. 3, 2, 40).
ingéns cui lumen ademptum (Verg. Aen. 3, 658).
furéns quid femina possit (5, 6).
Vix hostem, alterní si congregiamur, habemus (12, 233).
Absentém qui rodit amicum (Hor. Sat. 1, 4, 81).
- c.* Ignoscenda quidem, scirént-si ignoscere manes (Verg. G. 4, 489).
Sat fatis Venerique datum, tetigére-quod arua
Fertilis Ausoniae Troes (Aen. 9, 135).
Superát quoniam Fortuna, sequámur (5, 22).
- d.* Posthác-si quicquam, níl precor (Ter. Ph. 1, 2, 92).
Posthác incolumem sát scio fore me, núne si déuito hóc
malum (Andr. 3, 5, 5).

While the Greek language has the advantage of special forms for the pronoun of the first person, according as they are emphatic or the contrary, *ἐμou, ἐμοι, ἐμε*, as against *μου, μοι, με*, the Latin language was compelled to mark the distinction by accent, and this alike for the pronouns of the three persons, *me, te, se, mihi, tibi, sibi*. Thus we have an emphatic pronoun in :

Nulla meis sine té quaeretur gloria rebus (Aen. 9, 278).
Munera quae patriis ad mé portatis ab oris,
Vertite ad Aeneam (11, 281).

But very commonly these pronouns are devoid of emphasis and then appear as enclitics, as :

Néc faciam : etsi amór me grauitér cónsuetudoque eíus tenet (Ter. Hee. 3, 3, 44).

Haud equidem talí me dignor honore (Verg. Aen. 1, 339).

illá se iacet in aula (1, 144).

Solus ego in Pallanta feror, solí mihi Pallas
Debetur (10, 442).

tectusque tenét se (10, 802).

Sed neque currentém se, nec cognoscit euntem (12, 903).

Nostrasne euadere demens

Sperastí te posse manus? (9, 561).

But the treatment of personal pronouns as enclitics has already been seen above (p. 468), where for the comedians a short vowel (*mě, tě, sě*) has been claimed, when they appear in this character.

So far I may hope perhaps that assent will be given to what I have said on the subject of enclitics. But I feel less confidence, that scholars will follow me when I claim substantives and verbs as at times so degraded. The nominative of a noun is usually placed at or near the beginning of a clause ; but if it be altogether without importance and at the same time has the form of a pyrrhic, it is apt to skulk as it were behind some word with the character of an enclitic, as :

Hic illius arma

Hic currús fuit : hoc regnúm *dea* gentibus esse (Aen. 1, 21).

Talia flammato secúm *dea* corde uolutans (1, 54).

O passi grauiora dabít *deus* his quoque finem (1, 203).

Tantum effata caput glaucó contexít amictu

Multa gemens et se fluuió *dea* condidit alto (12, 886).

To these examples from Vergil add from Horace :

Iám satis . . . Grándinis misít *pater*.

This combination of *misít* and *pater* throws the accent on the fifth syllable of the verse, where it ought to be in agreement

with such Greek lines as Ποικιλοθρον αθανατ' Αφροδιτα and Catullus': *Pauca nuntiate meae puellae*. So too in the 'Carmen Saeculare' I would read: *Lucidum caeli-decus*, *Doctus et Phoebí-chorus et Dianae*. It is of course an admitted doctrine that *es* and *est* are often enclitics; and no difficulty will be made in so treating *sumus* in :

O socii—neque enim ignarí *sumus* ante malorum (Aen. 1, 202).

or *fuit* after *currus* in the line just quoted. But not a few lines in the 'Aeneid' exhibit other verbs of pyrrhic form as the thesis of the fourth dactyl, and this verb attached to an adjective, which constitutes the true predicate of the clause. I refer to lines like: *lení fluit agmine Tiberis, crebris micat ignibus aether*, which already Dr. Carey in his Latin Prosody proposed to read as here marked. No doubt it is the ordinary province of the verb to serve as a predicate; and this seems to be implied in Quintilian's words (1, 4, 18): 'in uerbis uim sermonis, in nominibus materiam.' Still at times the more important part of the predicate resides in some other word, especially an adjective, which is then always entitled to a very distinctive position, commonly either the first place of all, or if in the middle of a sentence, then made prominent by having the verb immediately following. Take as examples :

Bonás me absente hic cófecistis núptias (Ter. Ph. 2, 1, 28).

Καλον γαρ ατεχνως και μεγ ευρες τοῖνομα (Arist. Av. 820).

Διπλα δ'ετισαν Πριαμιδαι θ' άμαρτια (Aesch. Ag. 537).

In the line of Horace: *Pindarum quisquís studet aemulari, quisquís* already in itself emphatic is strengthened by having *studet* attached to it; and I quote this line the more because Bentley in the preface to his Terence unhappily selects it as his example of the now exploded doctrine that the Sapphic has a caesura *quinto fere semipede*.

Hitherto I have drawn attention chiefly to verbs of pyrrhic form, serving as a sort of enclitic; but even other verbs may be so attached to a preceding emphatic word as to affect its accent. Thus in the *Adelphi* (1, 2, 51):

Curémus aequam utérque partem, tu álterum
 Ego item álterum, nam ambós *curare* propemodum
 Repóscere illumst quém dedisti—

the accent on the final of *ambós* is on this principle justified; and Bentley's conjectural transposition, *curare ambos*, involves the twofold evil of giving to *curare* an emphasis it cannot bear and at the same time robbing *ambos* of its due.

It was said above that a preposition and its noun are to be accentuated as forming one word, and examples, such as *intér-se*, were quoted; but when a verb is attached to such a phrase, the accent may again be varied in consequence of this union, as:

Talibus inter-sé-firmábant foedera dictis (Aen. 12, 212);
 Inter-sé-coísse uirós et cernere ferro (12, 709).

I may here confirm what has been said of the placing a verb in the middle of a clause for the purpose of emphasizing a preceding word by the example of an outlying language. In the year 1858 a distinguished member of the Philological Society read several interesting papers on the peculiarities of his native language, the Magyar. When he had brought the series to a conclusion, I drew his attention to the fact that he had passed over a subject which for me had a special interest, the position in a sentence of the verb. The question seemed to be one which had never occurred to him; and it was only after a little thought that he replied: "We generally place it at the end of a clause." The word 'generally' led me to ask what were the qualifications implied in the term; and again, after a little thought, he said: "If emphatic, it always comes first of all." A third time I pressed him with a question: "But does it never occupy any place but that of first or last?" and after a third pause for reflection, he answered: "If in the middle of a sentence, it always follows an emphatic word." I was much pleased with this result, for the three rules were precisely those which for many years I had claimed as governing the place of a Latin verb, and which I believe to hold also for the Greek language.

But a word may be emphatic without having a verb to follow it; and then may so far tyrannize over an unimportant word or

phrase that comes immediately after it, as to attach the same enclitically to itself, and in so doing vary its own accent. Vergil for example, when speaking of Dolon's ill-fated offer to enter the Grecian camp as a spy, on the condition of having for his reward the chariot of Achilles, says :

Illum Tydides alió pro talibus ausis
Adfecit pretio (Aen. 12, 391).

Similarly the accent thrown on *Turni* by means of an enclitic *nunc* adds to the rhythm in : Te Turní nunc dextra gerit (12, 97); and still more clearly is this to be felt in (12, 156) : Non lacrimís hoc tempus ait Saturnia Juno.

When a vocative presents itself in the middle of a sentence, it is usual for printers to inclose it between two commas; but I am disposed to think that a good reader would dispense with the first of these, and treat it as a secondary word, often enclitically added to what precedes, this being generally a word of some importance. On this principle I would account for the accent in :

Inuení germana uiam—gratare sorori (Aen. 4, 478).
Hoc illúd germana fuit ? (4, 675);
Dabitúr Troiane quod optas (7, 260).
En agros et quam belló Troiane petisti
Hesperiam metire iacens (12, 359).
Neque me indecorém germana uidebis (12, 679).

There are yet other classes of phrases, where the 'conjunctio uerborum' serves to account for an unusual position of an accent, as first that of an adjective and its substantive; and this holds alike of the comic metres and those of Vergil, etc., as in

Úter ibi meliór-bellátor érit inuentus cántharo (Pl. Men.
1, 3, 5).
Étiam me iunctís-quadrígis minitátú's prostérnere (5, 5, 36).
Ét mihi des nummós-sescentos quós pro capite illíus pendam
(Pers. 1, 1, 37).
Véctus capitalí-periclo pér praedones plúrúmos (Trin.
4, 3, 81).

And so in the twelfth book of the *Æneid*: *crimén-commune* *repellam* (v. 16); *istó-certamine casus* (61); *coniúx-Lauinia campo* (80); *portís-sublimibus astant* (133); or at the beginning of lines: *Semiuirí-Phrygis* (99); *Magnanimí-Iouis* (144). But a genitive attached to a noun has a similar connection with it, and so we have: *Prosequere, in-durí-certamina Martis euntem* (73); *diri-sacraria Ditis*.

Another case of accent modified by the *conjunctio uerborum* occurs where words are closely united by a connecting particle as *et* or *que*; e. g. in: *turrés et tecta domorum* (*Æn.* 12, 132); *animó manibusque parentem* (348); *Amycúm fratremque Diorem* (509); *legés et foedera iungent* (822); *hominúm rerumque repertor* (829); *morém ritusque sacrorum* (836). But in enumerations without conjunctions a similar liberty seems to have been permitted as (*Pl. Bac.* 4, 8, 53; *Trin.* 4, 3, 15; *Men.* 2, 1, 10; *Merc.* 5, 2, 5):

Castór Polluces Márs Mercurius Hércules;

Cóllicrepidae, crúricrepidae, férriterí, mastígiae.

Istrós Hispanos Mássiliensis Ílurios (pron. *Il'rios*).

Vítam, amicitíám, uo(l)uptatem, láctitiám, ludúm, iocum.

Monosyllabic substantives seem especially disposed to connect themselves in pronunciation with words to which in sense they belong. Thus our eyes are familiar with *res-publica* and *iurandum*. Similarly Priscian (*Partit.* 2, 465 κ) treats *uir-illustris*, *uir-spectabilis*, as pronounced *sub uno accentu*. A better proof of the close connection of such a monosyllabic word with its adjective cannot be found than such a passage, as *Lucr.* 2, 1050,

res-ipsa-que per-se*
Vociferatur.

But the same idea is consistent with the metre of:

Mé qui abusus súm tantám-rem pátriam porro in diuitiis
(pron. *dítiis*). *Pl. Trin.* 3, 2, 56;

Quantús-res turbo, quántas moueo máchinas, *Glor.* 3, 2, 11.

* Exactly in the same way *id* is shown to be a proclitic in: *Íd-petessám id-pérsequar-que córde atque animo et uíribus* (*Capt.* 2, 3, 27).

Multás-res simítu in meó corde uórso (Bacchiac metre),
Trin. 2, 1, 1.

Quantum *éx-ipsá-re* cóniecturam fécimús, Ter. Haut.
2, 3, 25.

Gráuius tuum erit únun uerbum *ad-eám-rem* quam cen-
túm mea, Trin. 2, 2, 107;

Nihil ístac opus est árte *ad-hánc-rem* quám paro, Ter.
Andr. 1, 1, 5;

Quam tibi de quauis *uná-re* uersibus omnis, Lucr. 1, 416.

Similarly we have in *mala res* of the following line an anapest cut down by the law of consecutive vowels to a trochaic spondee *mál'res*:

Habeás ut nactu's: nóta *mala-res* óptumast (Pl. Trin.
1, 2, 25).

The little noun *uis* is another example in point; and here we may rely in the first place on the fact that in MSS. *summá-úi* is at times written as a single word; for example in Liv. 6, 9 in the Harl. MS. 2672. Following this we have a satisfactory rhythm in:

Illi inter sese *multá-úi* braccia tollunt (V. Aen. 8, 452).

Add G. 3, 220; A. 1, 275; etc.; *magná-úi*, G. 1, 169; *quá-úi*, A. 12, 917; and

Significant initum percussae corda *tuá-úi*, Lucr. 1, 14.

And to them may be added combinations such as: *tergemíní-uis* Geryonai, odora *canúm-uis*, etc.

Spes is similarly treated in: *uaná-spe* lusit amantem (Verg. A. 1, 356); *subitá-spe* feruidus ardet (12, 325) and: quid struis aut *quá-spe* gelidis in nubibus haeres? (12, 796). And after all we have a similar union even with a trisyllabic ablative in *magnopere* and *sumnopere*.

There is yet another case that deserves some consideration. Bentley in several notes to his 'Terence' has a phrase 'acnitur ob interrogationem' or something equivalent, meaning accented on the final, as Andr. 3, 4, 7; 4, 1, 20; Eun. 4, 4, 42; Ph. 1,

4, 29. In the first three of these there are other justifications of the accent claimed, or else the readings are doubtful, so that I quote but the last :

Quíd *facerés* si aliúd-quíd grauius tibi nunc faciundúm foret ?

The question however is one which requires further examination. Passages which seem to support Bentley's views are :

Quíd *factúmst* ? Meretrícem indigne déperit. Non tú taces ? (Pl. Bac. 3, 3, 66).

Síc hoc digitulís duobus *súmebás* primóribus ? (Ib. 4, 4, 24.)

Quíd ego nunc *faciúm* ? domum ire cúpio ; at uxor nóñ sinit. (Men. 5, 5, 60).

Quíd *maneám* ? Clamidem hánc commemores quánti conductást. Quíd est ? (Ps. 4, 7, 88).

So in Vergil we have :

Iustitiaene prius *mirér* belline laborum ? (Aen. 11, 126).

Cessás in uota precesque,

Tros ait Aenea ? *cessás* ? neque enim . . . (6, 51).

Qua tibi lucem Arte *morér* ? (12, 874).

And then from Horace :

Cessát uoluntas ? non aliá bibam Mercede.

It is a familiar fact that a Latin adjective in preceding its noun asserts a title to emphasis. Still more decided is this assertion, when the noun is thrown to the end of the clause ; nor does any doubt arise as to the connection of the two words from this separation, inasmuch as the *intensio uocis* with which the adjective is then uttered causes it to be still ringing in the ear so to say, when the clause is completed by the utterance of the noun.* Thus in one sense the two words are not separated. Hence in

Aequám memento rebus in arduis

Seruare *mentem*

* Of course the connection is to a great extent asserted in the common suffix of case, number and gender, so that the classical languages may avail themselves of this liberty, where it would be too violent for a modern language, especially one so devoid of inflection as English.

or

quiuís stomachetur eodem

Quo personatus pactó pater

the emphasis of the adjective is shown first by its occupying the first place, secondly by the verb immediately following, thirdly by preceding its noun, and fourthly by throwing that noun as it were to the end of the clause, so that this emphasis to use mathematical language is of the fourth power.

Elision is another affection of language which often leads to a modification of accent. The words *negléxisse*, *antíquom*, *lenóni*, *nescire*, *délátam* in themselves have of course the accent on the long penult as here marked; yet Terence in the 'Phormio' takes the liberty of throwing back the accent, when the final vowels are suppressed by elision, as in :

Amó te et non néglexisse habeo grátiam (1, 2, 4).

Ad hóspitem ántiquom : *ís senem per epístulas* (17).

Ea sérniebat lénoni *impuríssimo* (33).

Nostér quid ageret, nescire : *et illam dúcere* (67).

Ad pórtitores ésse délatam : *hánc petam* (100).

At the same time this change of accent was no way imperative, as seen in :

Nihil áderat adiumentí *ad pulcritúdinem* (55).

Set epístulam ab eo adlátam esse audiui modo et (99).

Similarly Vergil seems to avail himself of the right to modify the accent of *loricam*, *obsedére*, *conceptúmque* in the lines :

Circumducent lóricam *umeris* ; *simul aptat habendo* (12, 88).

Obsédere, *alii portis sublimibus astant* (12, 133).

Aut tu bella cie, conceptúmque excute foedus (12, 158).

On the other hand he rejects the privilege in :

ferróue *haec regna lacessent* (12, 186).

tellúrcem *effundat in undas* (12, 204).

caelúmque *in Tartara soluat* (12, 205).

What is here said applies to those cases where a polysyllable is made up of two or more connected words. Thus *hac-fáma*

would have the accent as marked; but when suffering elision it may change this, as e. g. in Andr. 1, 1, 72:

Quid uérbis opus-est? *Hác-fama* impulsús-Chremes

In such a phrase as *totó-me monte quéerere*, *me* as an enclitic would lead to an accent on the final of *toto*; but if *me* be subjected to elision, the case is altered, as in Andr. 2, 2, 5:

Áudin tu illum? *Tóto-me* oppido éxanimatum quéerere.

Again *uicto* in itself would have the accent on the penult, but add an enclitic as *que* or *esse*, and the accent will then be on the *o*, *uictóque*, *uictó'sse*. Yet again let elision take place and we may now have a return of the accent to the *i*, as in Haut. 3, 1, 29:

Sí te tam léni et *uicto'ss(e)* anim(o) osténderis.

So too through elision we have the accent changed in Ad. 5, 8, 22:

Vidétur: si uos *tánto-opere* istuc uóltis, fiat. Béne facis.

In the case of *uicto esse* as just quoted I claimed the accent for the *o* of *uicto* rather than for the *e* of *esse*. This may at first be thought a very trivial matter; but it will be found in many cases to have an important bearing on rhythm, as throwing the tone on an important word rather than on an idle enclitic. Already Bentley seems to have been misled through failing to see the real position of the accent in such cases, and so in Haut. 5, 1, 52:

Fac te patrem esse sentiat; fac ut audeat

he objected to the reading of the MSS., because he said the all important *patrem* was 'in thesi,' and wished to correct the evil by transposition of *esse* and *patrem*, thus violating the canon,*

* I refer to Ritschl's doctrine as stated in his 'Prolegomena,' p. 128: "brenem uocalem ante mutam cum liquida nunquam uel apud Plautum uel in neteri poesi Latinorum corripí (he means: non corripí) tam est pro certo et explorato habendum ut de hac quidem re non amplius additurus sim in his prolegomenis." In confirmation I may add that in reading Terence's six plays in the text of Bentley with especial attention to this point I found violations of the law: *Tháis se pátri*,

now thoroughly established for the old comedy, that a vowel in 'doubtful position' was of necessity short, and not common, as in the Augustan age. But the change for his purpose was unnecessary if we read the words, as: *Fac te patrém'sse sentiat*.

On the same principle I wrote above (p. 459) *huiús'sse* in Haut. 2, 3, 92, in preference to *huius ésse* of Umpfenbach, thus giving to the pronoun its due emphasis.

Modern editors seem sometimes, though rarely, alive to this distinction. In the Trin. 4, 3, 85 for example Ritschl* has all I could desire, when he writes:

Vísne aquam

Tibi petam? Res quom ánimam agebat, *túm† esse* offusam
opórtuit.

So too Umpfenbach felt that *me* was emphatic in Hec. 2, 3, 6, and accordingly printed:

Hábui illam ac si *ex mé esset* nata: néc qui hoc mihi cue-
niát scio.

Yet their general practice is at variance with this; and in order that the advantage which results from a more strict observance of the accentuation I am contending for, may be more clearly felt, I will quote at length the following lines from ~~two~~ plays of Plautus and Terence:

Tantúm 'sse oportet: récte rationém tenes (Glor. 1, 1, 47).

Ita me ínsimulatam pérperam probri 'sse somniáui (2, 4, 39).

Eun. 5, 8, 9; *facta est dúplici*, Haut. prol. 6; Nil *sūpra*, Ad. 2, 3, 11; and as suggested in his notes: Et scílicet iam *mé* uoles hoc *pátrém* orare ut célet. In every one of these, as in that quoted above, the reading is from his own conjecture.

* In his 'Prolegomena,' p. 251, he refers this to the *accentus logicus* which he seems to distinguish, I think incorrectly, from *accentus* as used by the Grammarians. See too what he says in p. 261.

† Similarly in the Phorm. 3, 2, 18, a long disputed passage, I would propose to set matters right by reading *ulla* for *alia*, and a transposition of *hoc* with *esse*, so as to have:

Neque Ántipho ulla cum ócupatus éssét sollicitúdine,
Túm'sse hoc mihi obiectúm malum!

Dícent te mendácem nec uerúm 'sse, fide nullá 'sse te (4, 8, 59).

Ego te ántem noui quám 'sse soleas ímpotens (Ter. Haut. 2, 3, 130).

Íllene? sed reprimám me: nam in metú 'sse hunc illi'st útile (1, 2, 25).

Éxponendam. O Iúppiter, tantúm 'sse in animo inscítiam (4, 1, 17).

Numquam hódie tecum cómmutaturúm patrem

Unúm 'sse uerbum, sí te dices dúcere (Andr. 2, 4, 8).

But I go farther and claim a similar treatment of *esse* even when preceded by a consonant, as :

Nec quóm me melius meá Scaphā reár 'sse deficátam.—Pl. Most. 1, 3, 2.

Solént 'sse: id non fit. Vérum dicis: quid érgo nunc faciám Syre?—Ter. Haut. 5, 2, 40.

Míhi sciunt nihil 'sse. Dices dúcent damnatúm domum.—Ph. 2, 2, 20.

Hanc Démípho negát 'sse cognatám? Negat.—Ib. 2, 3, 6.

Virís 'sse aduorsas áeque studiumst, símilis pertinácia.—Hec. 2, 1, 5.

Tuós 'sse ego illis móres morbum mágis quam ullam aliam rem árbitor.—Ib. 2, 1, 42.

Ádeon rem rediísse ut qui mihi cónsultum optumé uelit 'sse.—Ph. 1, 3, 1.

In thus claiming the sound of 'sse for *esse* after a consonant I shall be thought by some overbold; but in the other case, where a vowel precedes, over and above the advantage of a better placed emphasis I may appeal to the Greek habit in certain cases of suppressing the initial vowel of the second word in favour of a long final vowel, as $\mu\eta\ \kappa\ \phi\rho\varepsilon\nu\sigma$ Sept. c. Th. 873, $\mu\eta\ \text{'}\rho\omicron\lambda\omega\lambda\omicron\tau\alpha\varsigma$ Sup. 209, and the far stronger case of $\mu\eta\ \text{'}\mu\epsilon\lambda\epsilon\iota\nu$ Sup. 706, where the dropped prefix carries with it so strong a meaning.

Again in not a few cases it seems probable that instead of destroying either one or the other contending vowel, the two

were blended into a sort of diphthong or perhaps an intermediate sound, like the Greek *μη ου, οὔμος, ὄνηρ, κᾶτα*. Thus *cho* which by German editors is habitually printed *extra uersum* may safely be read with the following *an* as a single syllable = *yōn* (or *yoan*) in Trin. 4, 2, 89 :

Ehó an etiam Arabiá'st in Ponto? Est: nón illa ubi tus
gígnitur.

Add Trin. 4, 2, 100; Poen. 1, 2, 121; ib. 4, 3, 14; Rud. 2, 7, 20. Again in Ter. Ph. 2, 3, 21: Videás te atque illam, ut nárras. I in malám cruce[m], and Eun. 5, 4, 21: Pró deum fidem, fácinus foedum! o infélicem adulescéntulum the *i* and *o* will alike vanish, unless we read *oínfelicem ad*, and *y* in *malam cr*.

But there is yet another form of elision which seems to have escaped notice. Quintilian (11, 3, 33) says: 'Et uocales frequentissime coeunt, et consonantium quaedam insequenti uocali dissimulantur,' where he is clearly speaking of elision, for he goes on to say: 'utriusque exemplum posuimus: *multum ille et terris*.' As his phrase *consonantes* is plural, we are led to ask what consonant or consonants has he in view besides *m*. Scarcely *s*, for that in old poetry was often dropped, even when a consonant followed. Is it not then the *d* of neuter pronouns? The more so as in Greek it is precisely the corresponding *v* of neuter pronouns that habitually vanishes. Compare too *ĩ-dem* as also the neuters *hoc istuc illuc*. This suggestion is in my mind strongly supported by the evidence of the verses of the old poets, for it at once enables us to get rid of not a few cases in which a prevalent school of German scholars would make vowels short, where two, nay even three mutes follow. Take for example the following lines:

1.*Qui(d) ábstulisti hinc? Dí me perdant sí ego tui quicquam ábstuli.

2. Pérque tua genua. Qui(d) óbsecras me. Inscétiæ
Meae ét stultitiæ ignóscas: nunc demúm scio.

3. Qui(d) ínterest? Hoc ádeo ex-hác-re uénit in mentém mihi.

* 1. Aul. 4, 4, 18. 2. Glor. 2, 6, 61. 3. Ter. Eun. 2, 2, 2.

4. Corréxit miles, quo(d) întellexi mînus : nam me extrusit foras.

5. Qui(d) ignáue, peniculón pugnare, qui istum huc portes, cógitas ?

6. Qui(d) huic híc negotist ? Túne has pepulistí fores ?

7. Nunc nóstræ timeo párti, qui(d) hic respóndeat.

8. Quidnam hóc est rei ? Qui(d) híc uolt neteratór sibi ?

Here the remedies suggested by Dr. Wagner ('Introd. to Aulularia,' p. 52) are to read *ăbstulisti*, *őbsecras*, and in Terence (see his notes) *ignăue*, *întellexi*, *huïc*, and *híc* before *respóndeat* and before *uolt*.

I next turn to the leading metres of Latin poets, commencing with those of an iambic or trochaic character, which may well be considered together, as substantially of the same character, for even the iambic senarius, or to use the Greek phraseology trimeter, is rather to be broken up into three portions, as represented by the scheme —

Syl. dítrochaeus, dítrochaeus, dítrochee.

The most perfect specimen of this metre is seen in the ode of Catullus :

Phasélus ille quém uidetis hóspites,

which runs on through seven and twenty lines without a single substitute for an iamb.

Another example is seen in the 29th ode of the same poet. But so strict an observance of the law would cramp a writer beyond all endurance. Thus Horace began an ode with :

Beátus ille qui procul negótiis

but soon found it convenient to admit certain varieties. The Greek poets in like manner learned to tolerate a spondee with an accent on the second syllable in place of a pure iamb in the odd places, and the epodes of Horace exhibit the same concession, as :

Qua múneretur té Priape et té pater.

4. Ib. 4, 5, 11. 5. Ib. 4, 7, 7. 6. Ad. 4, 5, 3. 7. Andr. 2, 5, 8.
8. Ib. 2, 6, 26.

In the trochaic division of the line this amounts to the substitution of an impure for a pure 'ditrochaeus.'

While this form of the 'senarius' in the Greek tragic drama was insisted upon with the sole exception of an occasional solution of a trochee into a tribrach, the Latin language was obliged to claim a freer liberty, owing no doubt to the fact that the Latin language has a larger proportion of consonants; and again the very nature of comedy claims for it a greater licence. But even in Latin comedy examples are not unfrequently found, which will bear comparison with Greek verses of the same character, eight for example in the first scene of the *Andria*:

Neque cómmouetur ánimus in-ea-ré tamen—
 Cum dóte summa filio uxorem út daret—
 Nil* súspicans etiám mali. Hem quid ést? Scies.—
 Adeó modesto, adeó uenusto, ut nil* supra.—
 Seruáui. Honesta orátio. Recté putas.—
 Venít Chremes postrídie ad me clámitans.—
 In Pámphilo ut nil* sít morae: restát Chremes—
 Curábo: eamus núnciam intro. I práe, sequor.

But while the senarius was adopted for the more quiet scenes of Latin comedy, a longer line was called for in the case of strong excitement; and here we have three varieties to say the least:

Syl. ditrochaeus ditrochaeus ditrochaeus ditrochee;

or the same without the *anacrusis*, the learned name for the prefixed syllable; or thirdly, a complete trochaic tetrameter made of four *ditrochaei*. The last as marking great vehemence occurs but rarely, while the two preceding run on for many lines together. Here again it is easy to exhibit verses which may bear comparison with the corresponding verses of Greek tragedy, as first from a short scene of eleven lines (*Haut.* 4, 2):

Nil ést: triumpho sí licet me látere tecto abscédere—
 At sic opinor. Nón potest. Immo óptume euge habeo
 óptumam.

* Editions have *nihil* which was no doubt pronounced as *nil*.

And then from the first twelve lines of the *Phormio* (2, 2):

Óppido. Ad te súmma solum Phórmio rerúm redit—
Cédo seuem: iam instrúcta sunt mi in córde consília
ómuia—

Nón itast; factúmst periclum; iám pedum uisást uia.

But while the three varieties just enumerated belong to excited scenes, the vehemence of passion rushes at times into lines of still greater length, either iambic hexameters, or trochaic hexameters catalectic, which differ only in the addition of an initial syllable to the former. Such a line exceeds the breadth of an ordinary page, and through this alone I believe has arisen the practice of dividing such lines into tetrameters and dimeters.

In support of my view I refer to the fact, noticed by Bentley, that according as the long line ends with a trochee or iamb, the dimeter begins with the same.

In *Andria*, 1, 5 we have two consecutive lines of this character:

Hanc óbstinate operám dat, ut me a Glýcerio miserum
ábstrahat? Quod sí fit, pereó fúnditus.
Ádeon hominem esse ínuenustum aut infelicem
quémquam ut ego sum! Pró deum atque hominúm
fidem!

Such lines are of course exceptional. I next proceed to a variety not unfrequently employed, but almost without exception for scenes of a jocose character; and again I give lines as strict as the Greek ear would demand, from the *Eunuch*, 2, 2.

Dum hæc lóquimur intereá loci ad macéllum ubi
aduenínus—
Ecquíd beo-te? Mén'? papæ. Sic sóleo amicos.
Láudo.—
Num quem éuocari hinc uís foras? Sine bíduom hoc
praetéreat.

So far I have drawn my instances from Terence in preference, inasmuch as the text of this author is more trustworthy; but

Plautus also has lines of equally pure rhythm, as from the *Trinummus*, act 1, sc. 2 :

Vt té uidere audíreque aegrotí sient—
 Suspícionem et cúlpani ut ab se ségregent—
 Suspíciost in péctore alienó sita—
 Est átque non est in manu Megarónides—
 Suámque filiám 'sse adultam uírginem—
 Quoniam hinc iturnst ípsus in Seléuciam.

And then for the comic septenarius from the *Rudens*, 2, 1 :

Necéssitate quicquid est domi íd sat est habéndum—
 Pro exércitu gymnástico et paláestrico hoc habémus—
 Domúm redimus clánculum, dormínus incenáti—
 Famélica hominum nátio. Quid ágitis? Vt perítis?—
 Data uérba eró sunt : léno abít sceléstus exulátum—

And others might be quoted from the same scenes, if some of my doctrines are accepted, as for example the short vowel of an unaccented *mě*. Thus from the same scenes of the *Andria* and *Rudens* I might quote :

Sine núnc mě méo* uíuere intereá modo—
 Si uídero, exquisíuero : faciét mě certíorem.

But no doubt in a large majority of examples we must claim for the verses of Latin comedy the same freedom that is claimed for English verse, viz., that unaccented syllables, though for the eye long by position, are to be accepted as rhythmically short.

But the whole theory of elision has something strange in it, when carried to the extent which is seen in the language of Latin verse. Had the practice of omitting elided vowels in writing as well as reading, which prevails in Greek writing, existed for Latin, there would often perhaps have arisen some difficulty for us in following the meaning. Yet in a large number of such cases the adjoining words would have prevented confusion. Take for example such a line as that near the commencement of the fourth book of the *Aeneid*, as :

* See above p. 458.

Quem sese ore ferens, quem * forti pectore et armis ;

the silent *e* of *pectore*, can cause no difficulty about the nature of the case, as this is determined by the neighbour words *forti* and *armis*, to say nothing of *ore*. Thus the bad habit of declining adjectives which dis-figures the Latin language has here some compensating advantage.

What has been advanced in this and the three preceding chapters has, it seems to me, an important bearing on all Latin poetry. As to the Comic writers I have already said enough. But the influence of accent in the Latin dactylic metres demands some consideration.

The usual treatment of Latin metre seems to me very generally to betray something of a pedantic character. But little reference is made to what ought to be the chief judge—the ear. Horace's "Legitimumque sonum digitis callemus et aure" has been a somewhat misleading guide, as inviting a preference for the fingers over the organ of hearing. It may be excused if a beginner is taught to scan his hexameters; but this after all is but a first step in the subject, and our scholars are sensible of this, when they attempt to supplement their first lessons by the doctrine of caesura; but here again there is more of rule than reason.

By the very name dactylic hexameter we are told that the dactyl is the base of the system, so that a line like

Νουσον ανα-στρατον ωρσε κακην ολεκοντο δε λαοι

has the first claim to our attention. But a long-continued repetition of such lines would soon cloy upon the ear, even without the alliteration which throws something like ridicule on lines like :

* This reading *quem* is stated by Forbiger and Conington to rest solely on conjecture, whereas it is the reading *prima manu* of a MS. which by the best authorities is thought to stand foremost in antiquity, the F of Ribbeck, i.e. the *schedae Vaticanae*. But had there been no such sanction for the reading, I should still have asserted it on internal evidence: 'And what does his mien bespeak him, what his brawny chest and arms!' Markland's sense told him *quem* was the word.

πολλα δ' αναντα καταντα παραντα τε δοχμια τ' ηλθον

O Tite tute Tati tibi tanta tyranne tulisti.

A spondee therefore was occasionally admitted as a substitute for the legitimate dactyl, under the condition however that such spondee should have a metrical accent on the first of the two syllables, as :

Οιωνοισι τε πασι Διος τε τελειετο βουλη—

Párs in frústa secánt, ueribúsque treméntia figunt—

Jámque facés et sáxa uolánt, furor árma minístrat—

A'lbáique patrés et áltae móenia Rómae ;

and so on with two or more such spondees, until we come to lines which have a dactyl only in the fifth foot ; nay even in this place a spondee was at times acceptable with pleasing result, as in

Ουρεα τε σκιοεντα θαλασσα τε ηχηεσσα

Vos ego saepe meó, uos carmine compellabo (Catul. 64, 24).

But I doubt if Homer has a line so unmusical as the following of Ennius without a single dactyl :

Όλλι cráteris-ex áuratís hausérunt,

Όλλι répondít-rex Albaí-Longái.

But even the admission of occasional spondees with the accent on the first syllable involved a similarity of rhythm, the monotony of which would soon be offensive ; and hence a new liberty was tolerated, or rather approved, in what I may call an approach to an iambic rhythm in the first part of a line to the extent sometimes of two and a half feet, sometimes of three and a half, as :

Καλλάν τε ζάθεην—Τεινέδοιο τε Φιφι Φανασσεις.

Καλχάς Θεσφόριδης—οιωνοπολων οχ' αριστος.

Ítáliam fáti prófugus—Lauínaque uénit.

Quam Iúno fértur—terrís magis omnibus unam.

Thus two consecutive lines near the beginning of the second act

of the Menaechmi would with all accuracy fit into the first part of a dactylic hexameter

Terram conspiciunt—

Si adueniens terram uideas.

Again we meet with what is something half-way between this and the stricter dactylic rhythm, viz. lines beginning with a dactyl or a trochaic spondee, so to say, followed again by an approach to an iambic rhythm, as *Ἡτοί ὄγ' ὥς εἰπων, 'Οὐστὶς ἐμευ ζῶντος*, *Multa quoque et bello passus, Prima quod ad Troiam, Talia flammato secum*. These latter remedies present themselves far more abundantly in Vergil than in Homer; and to my ear, on which I set no great value, make the Aeneid more agreeable in point of rhythm than the Iliad, simply because the variety is greater. Vergil too seems to me not inferior to the Greek poet in the skill with which he turns this variety to account. Thus there is something well suited to the assumed calmness of Juno, when she approaches Aeolus to solicit his aid in a succession of spondees,

Ad quem tum Iuno supplex—his uocibus usast.

So too '*Olli sedato respondit corde Latinus*' agrees with the quiet resolution of the aged monarch. Contrast too the description of the noisy Tiber with the solid firmness of Turnus in the consecutive lines:

Rauca sonans reuocatque pedem Tiberinus ab alto;

At non audaci Turno fiducia cessit.

It was with a proper respect for the dactylic rhythm that the poem commences with:

Arma uirumque cano Troiae-qui primus ab oris

while it closes also with three lines in which every foot commences with an accented syllable; and the spondees in the first two lines give way to a succession of dactyls in the last, the very exception in *indignata* adding to the strength of the passage:

Ilíc dicéns ferr(um) áduer-ó-sub pectore condit

Féruidus. Ást illí-soluóntur frígore membra,
 Vítaque cúm-gemitú-fugit indignáta sub-úmbras.

I have said but little of caesura, and little I think need be said, except to correct the common assertion that every line ought to have this distinction. To the beauty of the dactylic hexameter variety is of the first moment, and for one I find a pleasure in the occasional occurrence of lines where the words have no trace of caesura, being simply bisected or trisected into equal portions, and first bisected as :

Nunc Amyci cassúm-gemit, et crudelia secum (1, 221),
 Ignauom fucós-pecus a praesepibus arcent (1, 435),
 Expleri mentém-nequit, ardescitque tuendo (1, 713).

and then trisected :

Hic currus-fuit ; hoc regnúm-dea gentibus esse (1, 21),
 Aut portum-tenet, aut plenó-subit ostia uelo (1, 404),
 Aeneás-ait et fastigia suspicit urbis (1, 438).

And to these let me add, what, though neither bisected nor trisected, is yet without the usually required caesura :

Hic iaculó bonus ; hic longé fallente sagitta (9, 572).

I have already dealt with the hendecasyllabics of Catullus. Let me next show that the consideration of accents throws light on the lyric metres of Horace. Already in 1832 in a review of Carey's Prosody (*U. K. S. Journal of Education*, vol. 4, p. 356) I contended that the fifth syllable in the Sapphic stanza ought for the most part to have a strong accent, and again in the Penny Cyclopaedia (1834 v. arsis) asserting the same doctrine I protested against the misleading influence of the Antijacobin verses in Pseudo-Sapphic form, entitled the 'Knife-Grinder.' The same doctrine and the same illustration appeared in the first edition of the Varronianus (p. 275 note) without any reference to either of my articles.*

* I purposely insert this evidence of the plagiarism of Dr. Donaldson in a trifling matter, that I may express my contempt for the silly statement of a Reviewer, that it is "shocking" to make such a

It is I believe now generally admitted that the odes of the fourth book and the *Carmen Saeculare* are better specimens of lyric verse than the earlier books of the odes. I will therefore quote from the *Carmen S.* a few examples in support of the doctrine that the presence of a verb in the middle of a sentence is likely to affect the accent of the preceding word, so that the accent falls on the fifth syllable of

Quo Sibylliní monuere uersus—
 Dis quibus septém placuere colles—
 Rite maturós aperire partus—
 Litus Etruscúm tenuere turmae—
 Romulae gentí date remque prolemque—
 Quaeque uos bobús ueneratur albis—
 Qui salutarí leuat arte fessos—
 Si Palatinás uidet aequos aras—
 Quaeque Auentinúm tenet Algidumque.

The names Sapphic and Alcaic are too well established to give place to other names; yet in themselves they give no idea of what the metres are. I think it would not be amiss, to give a beginner a simple idea of the melody by using such phraseology for the Sapphic, as

Dítrochaeus dáctyly dítrochaeus (ter)
 dáctyly tróchee,

where our English pronunciation of trochee suits the idea. Again we might define the Alcaic stanza by

Syl. dítrochaeus dáctyly dáctyly
 Syl. dítrochaeus dáctyly dáctyly
 Syl. dítrochaeus dítrochaeus
 Dáctyly dáctyly dítrochaeus;

where for the third line we have what was probably the genuine rhythm, although by way of a not unpleasing variety the cadence of *Septémber, Octóber, Novémber*, may be admitted. The title

reference to one who is no more. As I publicly exposed his doings during his lifetime, so now too I reject the doctrine *de mortuis nil nisi bonum*, for what is better morality, *nil nisi uerum*.

Choriambic is usually applied to the first ode of Horace, but little that is musical seems to arise from the division

Mæce—nas atanis—edite re—gibus ;

and so I prefer what is simply expressed by

Syl. spóndee ánapest dáctyly dáctyly,

for here again I accept only as an occasional variety

Euitáta rotís palmaque nobilis.*

In the class of odes like 'Sic te dina potens Cypri,' the metre may be represented by

Spóndee dáctyly dáctyly

Syl. spóndee ánapest dáctyly dáctyly ;

and thus it will be found that in the odd or shorter lines an initial spondee with the accent on the first syllable gives the true rhythm, and is very generally preferred, for the verb by its place bids us accentuate

Quem mortís tímuit gradum

Per nostrúm patimur scelus ;

and in the twenty-first line *deus* is little more than an enclitic,

Nequiquám-deus abscidit.

Then the only refractory line seems to be

Commisit pelago ratem.

In the fifth ode, perhaps the most pleasing metre in the whole range of lyric poetry, the scheme will be

Syl. spóndee ánapest dáctyly dáctyly

Syl. spóndee ánapest dáctyly dáctyly

Spóndee dáctyly spóndee

Spóndee dáctyly dáctyly.

* May I step out of my way to express my satisfaction at the correction of this passage in a late edition by placing a full stop after *nobilis*, so that *Terrarum dominos* refers to the proud Romans, as opposed to the Greek lover of the race-course. The reading is one which I have adopted for more than forty years.

Here for the third and fourth lines the rhythm again prefers an accent on the first syllable; and of the eight words in question one alone, *fallacis*, runs counter, for again we must read:

Cui flavám religas comam?

Thus in all Latin verse accent plays a most important part.

CHAPTER XXXVI.

CLASSES OF LANGUAGES.—AFFINITIES OF LANGUAGE.

THERE are many opinions current in the literary world with respect to differences of character between languages, and these opinions not merely of common acceptation, but often made the basis upon which languages have been distributed into classes. Such distinctions I believe to be groundless ; and if so, it is only fitting that the error should be made the subject of inquiry.

In his *Comparative Grammar* (§ 108), the German scholar Bopp has quoted a passage from the writings of A. W. v. Schlegel, and given in his own abridged language a statement of the views of Fr. v. Schlegel, at the same time that he has put forward the doctrine which he himself deems to be the true one. According to A. W. v. Schlegel languages divide themselves into three classes : languages without any grammatical structure, languages that make use of affixes, and inflectional languages. To the last of these he awards the palm of superiority, and bestows on them the honorary title of organic languages, “because,” says he, “they contain a living principle of development and growth, and alone possess so to say, an abundant vegetation ; in other words, they have the wonderful faculty of forming an endless variety of words, and of marking the connection of ideas which these words denote by means of an inconsiderable number of syllables, which separately considered have no signification, but which precisely define the meaning of the word to which they are attached.”

Friedrich von Schlegel in the second place contends for two main genera of languages, dividing them into those which

express secondary ideas by an internal change of the root or inflexion, and those which affect the same object by an added word which already in itself expresses the additional idea, whether of plurality, of past or future, or other relation.

Again Bopp in the same chapter gives his own views, when, like Aug. Wilh. v. Schlegel, he contends for three classes: 1st, monosyllabic languages, which are incapable of composition, and consequently without organism, without grammar, as the Chinese; 2ndly, languages with monosyllabic roots which admit of composition, and to this power are almost exclusively indebted for their organic development or grammar. The main principle of word-formation in this class of languages according to him consists in the union of verbal and pronominal roots, which together represent as it were the body and soul of language, e. g., the Sanskrit; 3rdly, languages with disyllabic verbal roots, containing three essential consonants on which the fundamental meaning rests, as the Hebrew and Arabic.

By many writers, Mr. Prichard for example, in his 'Eastern Origin of the Keltic nations,' and Duponceau, to whom he refers, the idioms of the American tribes are called 'polysynthetic,' or 'polysyllabic,' a term by which some marked difference from our European tongues seems to be implied, and a difference still greater from the so-called monosyllabic languages of South-Eastern Asia.

Again some languages are defined as of a synthetic character as opposed to others of an analytic character.

Lastly we often find much contumely thrown on languages, as being barbarous and uncultivated; and in the same light are held provincial dialects as contrasted with what is read in books, or heard in the senate, from the pulpit, or in the drawing-room.

All such distinctions I believe to be groundless, and therefore injurious to the progress of philological science.

To begin with the Chinese. It is asserted of this language that it has a peculiar monosyllabic character, and is devoid of grammatical formation. We are taught in fact to believe that it is altogether like those one-syllable stories, which are consider-

ately placed before the eye of a child, when it takes its first lessons in reading; or such as those with which our jesting periodicals at times amuse older children. Unfortunately our knowledge of Chinese has been almost exclusively obtained through a medium which has led to much distortion. The distance of the country and the long maintained opposition of Chinese authorities to all intercourse with foreigners were serious obstacles to the attainment of accurate knowledge. Many of our earlier Chinese scholars made their studies of the language at Singapore instead of in China; and among those who have had opportunities for a nearer view too many have found, even at Macao and Canton, but very imperfect means of mingling with educated natives. Again what we commonly call Chinese seems to stand to the languages generally spoken in that country, much as Latin did some centuries ago to the vulgar tongue of Italy, France, or England. In other words it is rather a dead than a living tongue. But there has been a still greater hindrance in the medium through which Chinese is studied. Our scholars have learned it, as scholars generally do, through books rather than by oral communication. Thus they have allowed themselves to be led astray by what is merely an accident of the written language. The characters being monosyllabic,* they have hastily assumed the language to be the same; and the Europeans commonly believe that the Chinese have been contented with a form of speech, which by its mere monotony would have disgusted any other race of human beings. Such views are upset by the simple testimony of one who had the best oppor-

* There is reason for believing that the same monosyllabic character belonged at the outset to the written symbols of the Indo-European languages. In support of this view I may quote what I wrote in 1841 in the 'Penny Cyclopaedia' under the article Q. (see also the 'Varronianus,' p. 198, printed in 1844): "This letter furnishes evidence that the alphabetical characters were originally of syllabic power. Thus the Hebrew *koph* and the Greek *koppa* appear to have been used only in those words where the sound of *o* follows, as in *Cos Corinthus* and *Saracosis*, etc. Indeed the name of the letter implies as much. The Greek alphabet probably stopped at one period, like the Hebrew at τ , so as to have no *u*. On the other hand the Etruscan alphabet had a *u*,

tunities of obtaining exact knowledge, having been Consul at Ningpo, Mr. Robert Thom. From him we learn that the Chinese, like our own tongue, though rich in monosyllabic words, has no scarcity of disyllables, trisyllables, and polysyllables. In the preface to his 'Chinese Speaker,'* he directs one who would learn the language to try to get an intelligent native of Peking to read the Chinese, and to follow him on the English side of the page (*i. e.* the side with the Chinese written in English characters with an interlinear English translation), as a clerk follows the parson in church; and he goes on to say, that such a student cannot fail to observe, as he reads along, that many words are disyllables and not a few polysyllables, that some are accented on the ultimate, others on the penult, and others again on the antepenult, &c. Indeed Mr. Thom informs us that he was prevented from marking the said accents solely by the paucity of accentuated letters at his command. A short example from his book may be of use:—

Yih-ko-jin	heō	Kwán-hwa lai,
Now a man	in learning	the Mandarin language,
	tso shim-mo-tī ne?	
	what is his object?	

Those who deny to the Chinese a grammar, seem to have started with wrong notions of what grammar is in their own language, and on that account alone have failed to find that of which they were in search. The mere inspection of a Chinese grammar tells us that a certain syllable affixed to a Chinese

but no *o*. Hence in Italy the *q*, which by position in the alphabet corresponds to the Greek *koppa*, was limited to words where a *u* followed. In the same way the *kaph* of the Hebrew and *kappa* of the Greek were probably at first limited to those words where an *a* follows, as we know was the case in Latin; and as the modern name of the letter, *ka*, denotes, for it would otherwise have been called *ke* or *ek*. This view becomes more complete, if it be called to mind that the name of χ connects it with the vowel *ι*, and that the η or *H* of the Greek alphabet was originally a guttural aspirate, sounded perhaps as $\chi\eta$, and thus was adapted to denote either a guttural aspirate or an η ."

* 'The Chinese Speaker, or Extracts from works written in the Mandarin Language, as spoken at Peking,' part 1, Ningpo, 1846.

substantive serves to express the relation which Europeans denote by the term 'genitive case,' that another syllable added may imply plurality, and so on with the other secondary notions of grammar. It is also true that the mere proximity of two words is sufficient to express a relation between them without the formal employment of a special particle. But this again is no novelty, for we ourselves say *moon-light* when we mean the *moon's light*, or as the Germans say *Monden-licht*. Again the mere position of nouns with us, tells us whether they mark the agent or the object, and the same is seen in Chinese. But it may be opposed to what has been said, that the syllables which the Chinese employ as affixes have an original meaning of their own, for example *tei*, commonly used to denote the genitival relation, is at times employed as a verb equivalent to the Latin *proficisci*, whereas, to use the language of A. W. v. Schlegel the affixes of our European languages in themselves *n'ont point de signification*; but this is a difficulty I am not here called upon to deal with, as it is one against which I have protested throughout the present volume; and if the doctrine, that all affixes had originally a significance in themselves, be once admitted, the only distinction between the languages will be that the Chinese has undergone less corruption. This, however, I say with some hesitation, because it is highly probable that in the ordinary spoken languages, that is the living languages of China, many abbreviations of sound would present themselves, which do not appear in the written pages of the Mandarin language. Indeed some traces of such corruption seem to occur at times even in Mr. Thom's book, as when he writes a Chinese word *shin-tsze-rh*, i.e., a disyllable represented by three members of the Chinese *syllabarium*.

I take next into consideration the alleged distinction between word-building by addition of affixes, and word-building by inflection, as *domini*, *domino*, *dominum*, said to be formed from *dominus* by a change of *us* into *i*, *o* and *um* respectively; but here again the idea of change is wrongly introduced, as all the four forms have proceeded from agglutination of what was a significant syllable in the first place, followed by a compression

or partial destruction of the form, so that a quadrisyllable has been cut down to a trisyllable.

But grammarians, Bopp among others, speak of languages which express some modification of the main word by an internal alteration of the same, i. e., by what Grimm and the German philologists call 'motion.' Thus *man*, *goose*, *woman*, have for their plurals *men*, *geese*, *women*, and to the present *come* is attached a past *came*. These again are difficulties with which I have already dealt, contending that such forms have suffered curtailment; and that the change of vowel often resulted from a tendency to vowel-assimilation.

Of Bopp's pronominal roots I have already spoken at length, and so may pass to the question whether the distinction between synthetical and analytical languages has in it any reality. That language is synthetical, or as some say agglutinative, is assumed throughout this volume; but what is meant by analytical language is to me unintelligible. *Of a king*, *did love*, are by some given as examples of such analytical phraseology, as contrasted with *regis* and *loved*; but analysis means the solution or separation of what was united; and here all we can say is that *of a king*, and *did love*, have not yet been united by the printer, though in fact in speech they are to a great extent so united; and after all *loved*, to repeat what has been already said, has grown out of *love did*, so that the sole distinction from *did love*, is a reversal of the order of the two elements.

Another topic which requires a little consideration is the term 'polysynthetic' or 'polysyllabic,' as applied to the native American languages and the Basque. We have here a cause of error at work, the exact converse of that which has introduced so many wrong notions in reference to Chinese. As we arrived at our knowledge of the latter through the medium of the written language, so on the other side those who were brought into contact with uncivilized races like the Red Indians had no resource but to take down what they heard from the mouth; and as a natural consequence a whole clause spoken with unbroken utterance was honestly transferred to paper as a single word, and then by simple-minded Europeans accepted as some-

thing strange. Here it will be enough to quote a few lines from the 'Penny Cyclopaedia,' v. 'Aztecs.'

"The Aztec language is very regular in its construction, and abounds in words adapted to compliment. The word *notlazomahuitzeopixcatàzin*, i.e., 'my esteemed lord and reverend priest and father,' is the word commonly used by a Mexican in addressing a priest. This word is thus analyzed by Clavigero: *no*, 'my,' *tlazontli* 'esteemed,' *mahiuztic* 'revered,' *teopixqui* (God-keeper), 'priest,' *tatli* 'father.'"

As to the reproach which is often thrown on provincial dialects, and let me add the still more despised variety, entitled 'slang,' I may state at the cost of some repetition, that the dialect which gets established in polite society and in books, owes this privilege for the most part to the mere accident that a capital has been placed in a particular situation, the choice of such situation being in no way determined by any supposed superiority in the language of the locality. When Rome was the mistress of the world, the softer dialect which there prevailed was the favoured tongue of the Peninsula, and the guttural peculiarities of the N.W. of Italy were treated as provincialisms. In a later day Italian literature revived in the atmosphere of Florence, and the so-called pure language of Tuscany now looks down conceitedly on the 'patois' spoken at Rome and Naples.

But it is scarcely enough to place provincialisms on a level with the unduly honoured language of a capital. It is among the educated, it is in courts and capitals, in the busy haunts of commerce, that the greatest changes work their way, while the provinces, the regions of rustic life, more conservative, retain the true but despised idiom. And then as regards so-called 'slang,' Pegge's defence of the vulgarisms of London speech is throughout an argument in favour of what I am stating.

But unlimited praise is claimed for the classical language of Greece. In some senses this praise is due. The writers of Greece undoubtedly enlarged their vocabulary beyond the limits of the co-existing languages, as the wants of their varied literature demanded; but the roots, whence such words were deduced, existed before there was a literature; and the laws, under

which this vocabulary was built up, were also long previously established. But we must not confound the beauty of the architecture or the skill of the bricklayer, with the excellence of the bricks and mortar. Even before Homer's time there was a language abounding in roots, and indeed possessed of more genuine and uncorrupted grammatical forms than those which obtained in the glorious days of Sophocles and Plato. The language of the pre-Homeric age may be called barbarous, but for linguistic purposes it would be more precious than even what has come down to us. In fact the great value which is justly attached to the classical languages of Italy and Greece, is due, so far as philology is concerned, first to their antiquity, and secondly to the accident that they have been well recorded in books. For the study of language as language, it would have been just as well for us, if we had had in its entirety the language spoken at Moscow 2000 B.C.

But I shall be most in disgrace with philologists of the present day, in that I have not accepted as the basis of all linguistic study the all-honoured Sanskrit. On this head I shall do little more than refer to my volume of Philological Essays, especially the two which are headed 'Quaeritur,' and the questions which are there raised are rapidly passing with me into the more solid form of truths, seeing that but one writer has come forward to deal with them, viz., Prof. Whitney, and he gives an answer to a large number of my queries in agreement with my fears ('North American Review,' Oct. 1867, p. 521), and to a considerable extent condemns the proceedings of German Sanskritists. As to Prof. Max Müller's assertion in the second series of his Lectures (pp. 13, 14) that I am one of those who hold "that there is no such thing as an Aryan or Indo-European family of languages, that Sanskrit has no relationship with Greek, etc.," I have difficulty in expressing my thoughts within terms of decency. The Professor in support of the charge refers to the paper 'Quaeritur' just mentioned; but the whole of this paper assumes the very contrary.* Thus he

* See my remarks on the *S. kim* and *jna*, p. 279; *chi-ket-mi*, 280; *an* 'blow,' 285 and 296; *sasmin*, *tasmin*, 289; *sthâ*, 297; *bhrû*, 302;

has to extricate himself from a dilemma of an ugly character, the bringing forward such an accusation, either without reading the paper to which he himself refers as his authority, or after reading it. The option lies with himself.

Having thus considered the distinctions that are commonly made between languages, and given my reasons for the belief that they are groundless, I will conclude this part of my subject by stating that all languages are more or less valuable for the philologist, that all are made up of significant monosyllables,* two or more of these being united to form longer words. Thus the terms 'root' and 'growth' are in strictness unsuitable; and the German term 'Wort-bildung' again is more correct than 'development' of my title-page. 'Inflection' again is an objectionable term, as founded on a wrong view of things. Still certain grammatical terms have been so long established that it is now difficult to replace them by what is more suitable; and accordingly I have used the terms 'root' and 'development' like others, just as I speak of 'accusatives,' 'datives,' 'oblique cases,' etc., endeavouring to forget their origin.

But how is the affinity of languages to be established?

The vocabulary of a language consists generally of many thousand words; and hence although there be no real affinity, the occasional appearance of striking coincidences, the result of mere accident, is to be expected. Nay an occurrence of this kind is at times met with, where languages have an undoubted affinity. An example was seen in p. 140, in Sp. *mucho*, and E. *much*. Here the temptation to assume identity of origin, however

janitrī, junī, 305; *nakha*, 307. Let me also quote a passage from the same quarter, p. 307: "I have written in no spirit of hostility either to Comparative Grammar or to the Sanskrit language. On the contrary fully believing that the science must be benefitted, when the philologist extends his views over many languages, especially in the older varieties, but to the exclusion of none, I sincerely trust that some of our own classical scholars will apply themselves with independence and diligence to the study of Sanskrit."

* I have said monosyllabic roots; but I perhaps might further qualify this, for I am disposed to think that these roots began with a single consonant and ended either in a vowel or a liquid, as seems to be the fact with the Chinese vocabulary.

deceitful, was strong. But he would be a bold philologer, who claimed the Aztec *teo-pixqui* 'God-keeper' (see p. 513), as in its first element akin to the Gr. *θεο-*.

At times indeed languages most remote exhibit words which have all but a common form for the same idea, and truly point to a common origin. Thus Ewald and Lepsius I find contend, and I think on good ground, that the Hebrew names for the numerals 'six' and 'seven,' are in themselves so far good evidence for a distant connection between the Semitic and Indo-European languages. Again the fact that the syllable *ma* alike in Chinese and in Quichua, the native language of Peru, marks the same relation as with us in our words *Ma*, *Mamma*, and the L. *mater*, seems to me to be valid evidence in favour of the existence of one primeval tongue, the articulate sound, which first proceeds from an infant's mouth, being fondly appropriated by a mother to herself. But setting such cases aside we must be careful in weighing the evidence of similar forms, as bearing upon the question of affinity; and perhaps the safest course in such enquiries is to confine ourselves, at any rate in the first instance, to what presents itself in such classes of words as the elementary numerals, the personal pronouns, the ordinary terms of family relation, the verbs expressive of the simpler notions, and the suffixes which enter into conjugation and declension. Only a few evenings ago I heard a gentleman in our Philological Society read a paper in which he claimed the Etruscan language as a member of the great Altaic family which in pre-historic times had made its way by an inland passage from the N.-E. of Asia to the Mediterranean; and he began his paper by a phrase which I readily adopt, that in proof of linguistic affinity from similarity of form and power an ounce of grammar is worth a ton of vocabulary. Thus the following table abundantly proves a close relation between the leading members of the so-called Indo-European family, my authorities being for the Sanskrit and Zend Bopp; for Lithuanian Nesselmann; for old-Slavic Dobrowsky; for Gothic and old-German Grimm; for Norse Rask; for old Erse and Welsh, Ebel's edition of Zeuss; for Breton Legonidec.

<i>Sansk.</i>	éka*	.. dva	.. tri	.. chatvâr	.. panchan	.. shash	.. saptan	.. ashtan	.. navan	.. dagan.
<i>Zend</i>	aiva	.. dva	.. thri	.. chatwâr	.. panchan	.. chsvas	.. haptan	.. astan	.. navan	.. dagan.
<i>Greek</i>	éw	.. duo	.. tri	.. τετρα-†	.. πεντε†	.. éξ	.. έπα	.. okτω	.. εννεφα	.. δεκα.
<i>Latin</i>	oino	.. duo	.. tri-†	.. quatuor	.. quinque	.. sex	.. septem	.. octo	.. nouem	.. decem.
<i>Lith.</i>	wiena-	du	.. tri-	.. keturi-	.. penki-	.. szeszi	.. septyni-	.. asztoni-	.. dewyni-	.. deszimt.
<i>O. Slav.</i>	jedin-	dva	.. tri-	.. cheturi-	.. piati	.. shesti	.. sedmi	.. osmi	.. deviati	.. desiati.
<i>Gothic</i>	ain	.. tva	.. thri-	.. fidvôr-	.. fimf	.. saïhs	.. sibun	.. ahtau	.. niun	.. taihun.
<i>O. Germ.</i>	ein	.. zwe	.. dri-	.. vior-	.. vinf	.. sehs	.. sibun	.. ahtô	.. niun	.. zehan.
<i>Germ.</i>	ein	.. zwei	.. drei	.. vier	.. fünf	.. sechs	.. sieben	.. acht	.. neun	.. zeh(e)n.
<i>Norse</i>	ein	.. tvö-	.. thri-	.. fjögur-	.. fimm	.. sex	.. sjö	.. atta	.. niu	.. tiu.
<i>O. Erse</i>	oin	.. da-	.. tri-	.. cethir-	.. coic	.. se	.. secht	.. oet	.. noi	.. deich.
<i>O. Welsh</i>	un	.. dou-	.. tri-	.. petnar-	.. pimp	.. chvech	.. seith	.. oith	.. nau	.. dec.
<i>Brel.</i>	unan	.. daou-	.. tri-	.. pevar-	.. pemp	.. chouecl	.. seiz	.. eiz	.. naô	.. dek.

* In the Etruscan language the discovery of dice in a tomb has led Italian philologists to the belief that the words MAX and OX represent the numerals 1 and 2.

† Add the Aeolic varieties *πικρ-* and *πικρε*, the latter form leading to *πικρτος* = old L. *quinctus*.

‡ The base was perhaps *ter* as seen in *terni* and the adv. *ter* for *ter-is*. Cf. *tertius* and E. *third*.

For the terms of family relation we have the table:

<i>S.</i>	<i>Gr.</i>	<i>L.</i>	<i>Slav.</i>	<i>Lith.</i>	<i>Go.</i>	<i>O. G.</i>	<i>O. N.</i>	<i>Erse</i>	<i>Fr.</i>	<i>Sp.</i>
pitar	πατερ	pāter	otets'	tewas	fadar*	fatar-	fadir-	athair	père	padre
mātar	μητηρ	māter	mati	moter-	.. ..	muotar-	módhir-	mathair	mère	madre
sunu-†	ιιο-	filio-	syn	sunu-	sunu-	sunu-	son-r	.. ..	fils	hijo
duhitar †	θυγατερ	filia-	doch	dukter-	dauntar-	tohtar-	dóttir-	.. ..	fille	hija
bhratar	.. † ..	frāter	brat'	broli-	brothar-	bruodar-	bróðhir-	bruthair	frère	fra §
svasar	.. ..	sōror-	sestra	sesser-	svistar-	svester-	systir-	.. ..	sœur	sor §

* The Gothic had also *atta* 'father,' with which *athēi* 'mother' seems connected; as also perhaps the Slavic and Lithuanian terms for 'father.'

† On the virtual identity of all the words in these two rows with each other see above p. 373.

‡ The term φαρρη I should insert but for its change of meaning.

§ These however are used only in a religious connection, as denoting 'friar' and 'nun'; for the other sense they are superseded by *hermano* and *hermana*.

These are the more important relations, but similarity is seen in the terms for relations by marriage, as :

	<i>S.</i>	<i>G.</i>	<i>L.</i>	<i>Go.</i>	<i>O. G.</i>
Father-in-law	çvaçurah	ἐκυρο-	socero-	svaihra-	sueger
Mother-in-law	çvaçruh	ἐκυρα-	socru-	svaihro-	suegerinne
Son-in-law	jâmâtar	γαμβρο-	genero-		—
Daughter-in-law	snuçâ	ννο-	nuru-		sehnur
Brother-in-law	dêvri	δαφερ-	leuir	tacor	

But in the comparison of corresponding terms in allied languages we have yet an additional principle to guide us in the subjection of letter-changes to fixed laws. This is a matter which has been long acknowledged by writers on language. One of the best examples of it is seen in Rask's law as holding between the low German languages including the Scandinavian family and our own on the one hand, and Latin or Greek on the other. On this head I need not do more than refer to my Essays (pp. 125, 6), where on the evidence of Bopp I have asserted the claim of Erasmus Rask to the first notice of this law, leaving to Grimm that addition which gives the law between low and high German, or rather between low German and old high German.

Under Rask's law the interchange of consonants between Latin or Greek and the low German family is as follows; but while Rask compares the former language with his own native language, the Danish, it will be more convenient in our examples to take English in place of it.

The law then consists in this, that starting from Latin or Greek, thin consonants pass into aspirates, aspirates into thick, thick into thin. In other words:

<i>Lat.</i>		<i>Eng.</i>	<i>Lat.</i>		<i>Eng.</i>	<i>Lat.</i>		<i>Eng.</i>		
P	become respec- tively	F	||	F	become respec- tively	B	||	B	become respec- tively	P
K		H	||	H		G		G		K
T		TH	||	TH		D		D		T

And we may take as examples :

1. pater	father	frater	brother	labium	lip
pullus	foal	fel	bile	labor	slip
2. cornu	horn	hostis *	guest	genu	knee
corulus	hazel	hortus	garden	gnosco	know
3. tres	three	θyρα †	door	duo	two
tu	thou	θηρ †	deer	decem	ten

To this law of Rask, Grimm added a law of precisely the same form, as holding good between the low German, and high German, commonly called in England by the simple name of German. As modern German inherits for the most part the old German pronunciation, I shall take my examples to a great extent from the modern language, as most familiar to Englishmen; and where I am led to quote from the older language I shall place the words between brackets. Again I take English as the representative of the Low Teutonic family.

Eng.		O. G.	Eng.		O. G.	Eng.		O. G.
P	become	V, PF	|| F, V	become	B || B	become	P	
K	respec-	CH	|| H	respec-	G || G	respec-	K	
T	tively	Z, SS, S	|| TH	tively	D || D	tively	T	

Then as examples :

1. path	Pfad	deaf	Taub	be	(pi-m) ‡
pipe	Pfeife	staff	Stab	bone	(pein)
drop	Tropf	starve	sterben	beaver	(pipar)
2. oak	Eiche	thah-an,	} dag-en, Mid. G.	God	(cot)
token	Zeichen	Go. =		good	(kuat)
eke	auch	tace, &c.		go	(kank-an)

* We must remember that the first meaning of *hostis* merely was a foreigner without any notion of hostility.

† As *th* was unknown to the Roman ear and mouth, I am of course driven to the Greek for my examples.

‡ These words have now taken in German the forms: *bin*, *Bein*, *Biber*, *Gott*, *gut*, *gangan*, i. e. the same consonants with ourselves.

3. two	zwei	the	der	ride	reiten
hot	heiss	oath	Eid	dew	Thau *
it	es	death	Tod	death	Tod

But it must not be supposed that these laws of interchange are never violated, as some English writers seem to think ; nor indeed was it to be expected, seeing that no language is altogether homogeneous ; nor free, as time goes on, from internal changes. Nay not very rarely what is substantially one word has two or even more forms, between which the meanings are divided, as *gamble* and *gambol*, *bag*, *bay*, and *bow*, in English, *prouidentia*, *prudentialia*, and *provincia* (*prouintia*).

So far the interchange of consonants with consonants have been considered, but similar laws are found to exist between vowels. The subject is a vast one, but I will limit myself to some of the cases seen in our own tongue, as compared with German.

o (*oa*) E. interchanged with *ei* G., as : beide both, Eid oath, Leid loath-ing, kleid-en clothe ; eigen own, Teigh dough ; Eiche oak, Speiche spoke, Streiche stroke, Zeichen token ; Heil whole, Theil dole, heilig holy, heim home ; Bein bone, ein one, einst once, Stein stone ; Geist ghost, meist most.

oe (*o*) E. with *eh* (*ehe*) G., as gehen go, reh roe (deer), schlehe sloe, wehe woe, Zehe toe.

ea E. with *o* G., Brot bread, Strom stream, Tod death, gross great, Floh flea.

But what holds for kindred languages of course holds also for what we call kindred dialects. Thus the vocabulary of Aberdeenshire in its differences from English has its laws of interchange ; and so in the tale ‘Johnny Gibb of Gushetneuk,’ we have among others the four series of changes that follow :

1. aleen = alone	dreeve = drove	dizzen = dozen
beheef = behoof	eese = use	fit = foot
beet = boot	sheen = shoon	hizzie = hussie
dec = do	2. dist = dust	ither = other

* The combination *th* in German sounds now as a mere *t*, and indeed a certain German school now write *Teil* for *Theil* and so on.

jist = just	fite = white	min' = mind
niz = nose	fup = whip	poun' = pound
3. fa = who	fuskers = whiskers	Saun'ers = Saunders
fan = when	fusky = whisky	scoon'rel = scoundrel
fat = what	4. grun' = ground	sin'er = sunder
		won'er = wonder

But both vowels and consonants united are at times active in producing change. Thus many consonants when followed by *i* or *e* and a second vowel lead in the deduction of French and Italian words from Latin to a palatal sound represented by *g* or *ch* or *nge*, as : rabies rage, Vidubium (a town of Gallia) Vidouge, cauea cage, saluia sage, simia singe, uindemia vendange, com-meatus congé, linea linge, ordeum orge, cerea cierge, sepia sèche, Sepia (the river) Seche from French ; to which I will add one Italian example, ration- razione.

I have entered more at length into this question, in order to show the great advantage that one fresh to the study of a language, akin to one which he already knows, would obtain through looking at the new vocabulary from this point of view, as he would substitute for an irksome task what is somewhat amusing, and at the same time make his memory more retentive. Thus the *G. Tod* is not likely to tell its story to an English beginner, but with a knowledge of the letter-changes, he translates *t* into *d*, *o* into *ea*, and *d* into *th*, and so comes to a familiar word.

I have said that no language is thoroughly homogeneous. The anomalies sometimes arise from a provincial form having been brought into favour through the influence of some popular writer ; but over and above this, all languages abound in loan words. Nay not unfrequently an absolute invasion of foreign terms is brought about, it may be by conquest, as when the French, or rather Norman language was brought into this country, and obtained a permanent footing in the island ; or it may be through the peaceful adoption by a less educated race of the terms belonging to a people of higher culture. But in these cases the original language will still remain as the great sub-

stratum, the new terms floating above it, and scarcely inter-mixing with the old. Of this case we have a good example in the languages of Southern India, which having at most but a slight connection with Sanskrit, are said to abound in Sanskrit loan-words, but only as needed for such higher culture.

But languages are affected not merely by the incorporation of loan-words or loan-phrases from without; a foreign structure is at times adopted clothed in native words. On this head one example must suffice. Mr. Kington Oliphant of Balliol, in page 280 of his recently published work, entitled ‘Sources of Standard English,’ has done good service by pointing out that our conjunction ‘*unless*’ has grown out of a fuller phrase. “Bishop Pecock in the Repressor,” he tells us, “speaks of the Lollards, ‘whiche wolen not allowe eny governaunce to be the lawe and service of God, inlasse than it be grondid in Holi Scripture;’” and this he adds is but one of four examples in the book of the phrase in this fuller form. Now we have here a simple translation of the French *à moins que* as used in phrases like: *il n’en fera rien à moins que vous ne lui parliez.*

But I conclude this volume with the consideration of a question closely connected with this part of our enquiry, and of no little importance. It will be recollected that I have in the preceding pages again and again drawn evidence from the Finn and Lapp languages, and even from Chinese. For so doing, I am reproved by Professor Whitney of Yale College, in his ‘Oriental and Linguistic Studies’ (p. 213), in these words:

“Philologists who bring in Chinese and New Zealand and Finnish analogies to explain Indo-European words are thoroughly unsound, and need to reform their science from the foundation.”

Again he says in p. 212, speaking of the affinity of languages:

“Community of descent is to be proved, not by sporadic items of superficial resemblance, which may well enough be accidental, but by sufficiently pervading correspondence of material or of structure, or of both.”

Bopp he admits ‘attempted to prove the Malay-Polynesian tongues akin with the Indo-European;’ and this ‘by a searching and comprehensive investigation.’ Let me make a similar

attempt by putting together some of the facts already set down in these pages; and here I will be guided by the same conditions, which according to Prof. Whitney give value to the labours of Bopp, in other words limit myself to those which were laid down a few pages above as affording the best security in trying the problem of affinity, the evidence of pronominal forms, of numerals and of grammatical structure. To begin with the first of these, the Lapp pronouns (see p. 297, 8, or Rask's Gr. p. 79) run :

<i>N. mon</i>	<i>I</i>	<i>don</i>	<i>thou</i>	<i>son</i>	<i>he.</i>
<i>Pl. mí</i>	<i>we</i>	<i>dí</i>	<i>ye</i>	<i>sí</i>	<i>they.</i>
<i>G. mò</i>	<i>of me</i>	<i>dú</i>	<i>of thee</i>	<i>sú</i>	<i>of him.</i>

The Finn (Vhael p. 41) has :

<i>N. minä</i>	<i>I</i>	<i>sinä</i>	<i>or</i>	<i>tämä</i>	<i>thou</i>	<i>hän</i>	<i>or</i>	<i>se</i>	<i>he.</i>
<i>Pl. me</i>	<i>we</i>	<i>te</i>			<i>ye</i>	<i>or</i>	<i>you</i>	<i>he</i>	<i>they.</i>
<i>G. minun</i>	<i>mine</i>	<i>tämän</i>			<i>thine</i>	<i>hänen</i>			<i>his.</i>

Here the resemblance to the Indo-European pronouns is striking; but two points are especially to be noticed, first the interchange of *s* and *t* in the second person, corresponding to *sv* and *tu*, and secondly the identity of *hän* with the Scandinavian pronoun, for words of this class are never borrowed.

In the same page I compare the Persian habit of affixing curtailed pronouns with the power of a possessive to nouns, so that we have at once an identity of suffix and identity of structure, between :

Pers. *dar* 'door,' *daram* 'my door,' *darat* 'thy door,' *darash* his door;'

Lapp. *nipe* 'knife,' *nipam* 'my knife,' *nipat* 'thy knife,' *nipas* 'his knife; *aija* 'grandfather,' *aijabs* 'his grandfather.'

Add the Finn (Vhael p. 44):

Osa-ni or *osa-mi* 'my part,' *osa-s* 'thy part,' *osansa* 'his part,' *osamme* 'our part,' *osanne* 'your part,' *osansa* or *osahan* 'their part.'

Mr. Wedgwood again ('Tr. Phil. Soc.' for 1856, p. 1), draws attention to the Lapp postposition *cum* or *queim* 'with' = *L. cum*; and above all to the Lapp combination *mocum* 'mecum,' *tocum* 'tecum,' *socum* 'secum.'

In the same page he says: 'The particles *ek*, *ke*, (*ak*, *ka*), are used in Lapp to give emphasis to the pronoun, in precisely the same way as *ce* in Latin.

So too in Finn says Vhael (p. 49): The particle *ea* or *kñ* is added to pronouns for emphasis.

Then for the relative, as I have shown *quin* to be the base of the Latin pronoun, so Vhael tells us (p. 42) the particle *eum* after a pronoun has the power of a relative *qui quae quod*. Again the declension of the ordinary relative takes at least two forms, one of which, *eu*, invariably constitutes the first syllable through the cases alike of singular and plural, so that here we have identity with the Latin. The other form begins with *ken*, which again runs throughout the singular; and this is the very form, it will be recollected, to which, on grounds independent of the present enquiry, I was brought, as the primary source of the third-person pronouns of the Indo-European family, including the relative. Then as the *L. uter*, representing *cuter* (*κοτερος*), is the comparative of the simple relative, so in Finn *cu-mpi*, of the same power, has the suffix of Finn comparatives.

In Lapp one form of the interrogative is *gi* 'who?' gen. *gæn* 'whose?'. The other is *gutte*, gen. *gude*, where *g* supersedes the *c* or *k* of Finn, and the mute dental the nasal dental. The Lapp demonstrative *daat* (Fiellström), or *dat* (Rask), has a striking likeness to the German *der*, and one still stronger to our own *that*.

The Latin *quisque* has for its Finn representative a word which claims kin with it in both parts, viz. *cu-ca*; while the other variety, *io-ca*, has in its first part what corresponds with all accuracy to the S. relative *ya*; and the same is seen in the other form of the Lapp relative, which intermixes the syllable *ken* with *jon* or *jo* (see Vhael pp. 54, 55).

In the numerals there are certainly some traces of a common origin. In Lapp for the idea of 'one' Fiellström gives *acht*,

Rask *awft*, but the latter is no doubt a more corrupt form, the same change occurring in our *laughter*, as pronounced, by the side of its written form, the guttural sound of which corresponds to the G. *Gelächter*. But *ackt* has a strong likeness to the S. *eka*; and here I again point to the Etruscan MAX (*mach*) for the first numeral, which the philologist already referred to tells us is one of the proofs of his theory that the Tuscans made their way from the Altaic regions over the intervening lands to the Mediterranean, as the Huns etc. did in after time, *mach* in all the Altaic family of languages being either itself the term for 'one' or the base of the term; and he adds that here too the word has its best and only etymon, originally signifying 'finger,' which as held up alone is a natural symbol of the idea. I have assumed above that there is a close connection between the pronoun of the first person and the first numeral, and have further given reasons in support of the doctrine that both *ego* and the S. *eka* 'one,' had in the outset an initial *m*. The Etruscan *mach* seems to confirm this, and at the same time strengthen my argument for the affinity of the Finn etc. with the Indo-European stock. Again the second of the Etruscan numerals on the dice is ΘΥ, if we trust the inferences of Italian philologists, and on this theory we have again what at once approaches our own second numeral *thou*, and bears a strong likeness to our *two*.

For 'ten' Rask gives the forms: *lokke*, which he encloses in brackets, and *läge*; Fiellström writes *lücke*. This already is all but one with the Lith. *lika* which is generally accepted as a variety of *δεκα*, the *l* superseding a *d*, as in our own *eleven* and *twelve*. But the latter philologist gives a variety *tzecke* with the remark: '*tzecke* idem est ac *decem*.' This again is confirmed by the fact that in Finn while *yxi* is 'one' and *caxi* 'two,' the terms for 'eight' and 'nine,' as was noted above, are *cah-dexan* i. e. 10-2, and *yh-dexan* 10-1, so that *dexan* again = *decem*. This formation is seen also in the Lapp, where we find, says Fiellström, *ackt* 1, *gweckt* 2, with *kaektze* 8, *ütze* 9, or as Rask writes: *awft* 1, *gowft* 2, *gawtsé* 8, *awtse* 9.

The Lapp *chécha*, 7, has much in common with *ἑπτα*, a likeness the more distinct, when it is recollected that the *τ* of *ἑπτα* is

probably excrecent. Then Lapp *vitta* 'five,' if standing for an older *quinta*, bears a likeness at once to *quinque* and πεντα of composition, the *n* of these words being assimilated to the following *t*. In like manner the Lapp *chotte* bears comparison with L. *centum*. But the Finn term for 100 is *sata* itself, and this alone ought to satisfy Sanskritists as to the affinity of the languages, for surely they will never contend, that the inhabitants of this northern region have imported a loan-word from the distant India. Lastly the Lapp *du-hat* for 1000 has a fair analogue of *decem* in the first syllable, while *hat* may well be a variety of *chotte*, and indeed bears a close resemblance to the S. *sata*. A comparison with the Tentonic *du-sund* is also instructive, for while the first syllables are ~~all-but~~ identical, in the second we have for both the common interchange of *s* and *h*, *sund* in place of *hund*, *hat* in place of *sata*. The resemblances here are not indeed to be compared with what has been seen in the pronouns, yet put together can scarcely be accidental.

In the declension of nouns I have already noted that the genitival suffix *en* (*an* after strong vowels) is one familiar in the Indo-European stock, and I may add to the examples previously given the French possessives *mien*, *tien*, *sien*.

As to adjectives, their special inflections are for the comparative and superlative; and here the evidence of the Lapp forms is most instructive and convincing. Thus to take other examples than those given before (p. 264) Rask in p. 75 places before us:

darbash 'necessary,' comp. *darbash-eb*, sup. *darbash-amus*
alvos 'hatetul,' , , *alvos-eb* , , *alvos-amus*

Such superlatives bear a striking likeness to the Latin forms, and still nearer is what Fiellström (p. 22) gives, as:

jorbes 'round,' comp. *jorbes-ub* sup. *jorbes-umus*
wastes 'bare,' , , *wastes-ub* , , *wastes-umus*

Add to this that, as I have before noticed, we here see the origin of the L. superlative suffix *umus*, as deduced from that of the comparative.

I pass to the verbs, still looking to the grammatical structure. The Finn verb *maxan* (Vhael p. 80) runs

1 *maxan*, 2 *maxat*, 3 *maxaa*; 1 *maxamme*, 2 *maxatte*, 3 *maxawat*, where the plural *maxamme* tells us that *maxan* stands for *maxam*, just as *εφερον* is shown by *εφερομεν* to represent an older *εφερομ*. Here then the first and second persons, alike of the singular and plural have an unmistakable likeness to the classical languages.

Then for Lapp I take the past imperfect of the verb *jack-et* 'to believe' (Fiellström p. 60), viz.:

Sing.	Dual	Plur.
mon <i>jackib</i>	monno <i>jackimen</i>	mije <i>jackime</i>
todn <i>jacki</i>	tonno <i>jackiten</i>	tije <i>jackite</i>
sodn <i>jacki</i>	sonno <i>jackikan</i>	sije <i>jackin</i> .

Here we have what must remind the dullest of Greek forms; and let me add that the similarity of the dual and plural suffixes shows again how these forms were in origin one. Is it a mere accident that the Lapp part. *jacken* has a suffix so like the suffix of *cred-ent-* (n. *credens*) and that the so-called gerund *jackeman* is so like the termination of an old Greek infinitive?

But even the suffixes of secondary verbs exhibit at times what is common to the Latin. Thus verbs at once 'frequentative' and 'diminutival' are seen in the L. *conscribillo*, *uentilo*, *†stulo*; and the Finn has besides *lasken* 'soluo,' with the derived *laskelen* 'paulatim soluo' (p. 167), *cannan* 'fero' with *candelen* 'saepe fero'; *pedan* 'teneo' with *pitelen* 'tracto'; *käyn* 'eo' with *kawelen* 'ambulo'; *hyppään* 'salio' with *hyppelen* 'choreas duco'; *sana* 'verbum' with *sanailen* 'altercor'.

With this long preamble before me, dealing as it does exclusively with the classes of words which are generally recommended as most trustworthy for the purpose, I need not fear to add other members of the vocabulary. Thus, as Mr. Wedgwood points out, the Icel. negative is *ei eigi*, Dan. *ikke* corresponding to the Finn. *ei eika*; and I think it may be safely assumed that such a particle is not likely to be a loan-word from either of these languages to the other; but if so, it tends to prove a fundamental connection between the two languages in question.

Siemen 'seed' may well have been borrowed by the Finns

from the south, as they were probably at first a pastoral race; but this admitted, *paimen* 'a shepherd,' so like ποιμεν-, may boldly assert its claim to be a native. Add to these some at least of the many which Mr. Wedgwood quotes, as: *kampela* 'crooked' (cf. *καμπυλος*), *mamma* 'breast,' *porsas** 'a pig' (cf. *porcus*), *oras* 'a boar' (cf. *uerres*), *wilu* 'frost' (cf. *gelu*), *ohra* 'barley' (cf. *hordeum*), *kara* or *sara* 'sedge' (cf. *car-ex*), *salawa* 'a willow,' 'sallow' (cf. *salix*), *salata** 'to hide' (cf. *celo*), with *salaan** 'clam,' *sokia** 'blind' (cf. *caecus*), *sarwi** 'horn' (cf. *κερας* †). Lapp, *hüpos* 'horse' (cf. *ἵππος*), *all* 'high' (cf. *altus*), *sarwa** 'an entire reindeer' (cf. *ceruos* †), *waro* 'wares.'

I trust then that the affinity of Finn, Lapp and their cognates with the Indo-European stock will now be allowed by philologists; and if so, the whole family of so-called Tatar languages must go with them; and even a connection of Chinese with our European stock is not to be summarily rejected.

* In these there seems good reason for believing that the Finn, like so many of the Eastern languages, has substituted a sibilant for a guttural.

† These two together, as Mr. Wedgwood observes, confirm the old idea that *ceruos* means literally 'the horned one.'

INDEX.

I.—OF WORDS, ETC.

Latin words are commonly given in the crude form, but for neuters in the second declension *om-*, not *o-*, is taken as the suffix, e. g. *amentom-*, on the ground that this *om* represents an older *oc* or *og*. and so appears in the accusative of even a neuter noun. For the order of Gr. words χ , ϕ , θ , are treated as severally equal to *ch*, *ph*, *th*, and ψ as *ps*, and an initial aspirate as *h*.

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